2022 Restricted Substance Management Standard

Ford Motor Company
One American Road
Dearborn, MI 48126-2798

April 1, 2022

To: All Suppliers Doing Business with Ford Motor Company

Subject: 2022 Global Restricted Substance Management Standard (RSMS), Conflict Minerals, and American Automobile Labeling Act Reporting Requirements

This letter communicates the release of the 2022 RSMS, Conflict Minerals, and American Automobile Labeling Act (AALA) reporting obligations.

Compliance with these requirements is consistent with Ford Motor Company's commitment to environmental responsibility and conformance to global governmental regulations. Full compliance is a requirement of the production and non-production Ford Global Terms and Conditions and a key element of Q1, PPAP/PSW, and Program Engineering Sign-Off events.

Actions Required

- Confirm the receipt of this communication. Suppliers utilizing IMDS must complete the RSMS confirmation in the GMM Supplier Portal through Covisint, review the attached requirements, obtain parts lists, and report data as required. For all non-dimensional production materials RSMS confirmation will be required for every supplier data entry in the Global Material Approval (GMA) Tool. See attachment below for details.
- Every supplier is required to cascade the annual RSMS requirements down the supply chain to the lowest level and is obliged to control conformity. This is mandatory to ensure legal compliance globally and avoid governmental sanctions and penalties.
- Full IMDS reporting and compliance with this Standard must be achieved at least 8 months before Job 1. Full IMDS Reporting includes any materials/substances that may be added during certain processing operations.
- By December 31, 2022, provide the "Full RSMS Certification" for all products (production and service) in all markets via the Ford Certification Screen in IMDS. For all non-dimensional production materials RSMS confirmation and certification will be required for every supplier data entry in the Global Material Approval (GMA) Tool. See attachment below for details.
- If your company provides products to Ford Motor Company that contain tin, tungsten, tantalum, or gold, submit a Conflict Minerals Reporting Template by September 30, 2022, as described in the Conflict Minerals section of the Ford Supplier Portal.
- Ensure declaration of any intentionally added PFAS within your product(s) – please refer to the "RSMS Substances Being Considered for Prohibition" document for more information about the restriction and affected substances. An additional attachment has been added to the IMDS OEM Specific Info pages to identify a non-exhaustive list of potential PFAS substances.
- Beginning in mid-2023 CY, Environment Canada (ECCC) is expected to prohibit the manufacture, import, use, sale and offer for sale of the flame retardants DP and DBDPE and all products containing those substances (with no exemptions) for the Canada market.
- Assess the applicability of the recent US TSCA PBT final rules and ensure product compliance for all products, including machinery and tooling
- For products sold in the U.S., provide the combined U.S. & Canada percent content by dollar value for all parts to support AALA compliance by each product launch date. Please provide this information when solicited.
- The 2022 Global Manufacturing Materials Strategy (MMS) initiatives to reduce target toxic chemicals from our manufacturing operations are in the "RSMS Substances Being Considered for Prohibition" document.

If you have general questions, please contact Kelly Keller at (313) 845-4563, kkelle17@ford.com.

Robert Holycross

Robert Holycross
Vice President
Sustainability, Environment and Safety Engineering

Hau Thai-Tang
Chief Product Platform & Operations Officer

Attachment

Steps to Access the Ford Supplier Portal (Covisint)

Covisint hosts the Ford Supplier Portal (FSP) for Ford Motor Company. The FSP works as the gateway between suppliers and internally hosted Ford applications. Companies must register and be approved in Covisint to access Ford applications on the FSP.

To access this web application, you must have:

1. A Covisint User ID and Password
2. Permission to access the Ford Supplier Portal Service
3. Access to the GMM Supplier Portal and/or the Global Material Approval (GMA) application
4. Permissions to the applicable parent GSDB code/site GSDB code(s)

If you have all of the requirements listed above, please follow the steps outlined in Section A. If you are missing any of these items, please go to Section B before proceeding to Section A.

Section A: How to access the GMM Supplier Portal or Global Material Approval (GMA) Application on the FSP:

a. Go to **https://fim.covisint.com/ap/ford?TARGET=https://fsp.covisint.com**.
b. Click on the **Login** link.
c. Enter the *appropriate* Covisint user ID and password.
d. Click the **Login** push button.
e. **Select the Applications tab at the top of the screen.**
f. In the **Filter by** text field, click the drop-down arrow, select Functional Area, then select **Environmental** from the list.
g. Click the **Search** push button.
h. Click on **GMM Supplier Portal** or **Global Material Approval (GMA)** to launch the application. (If you don't see the GMM application, please reference Section B 2 below.)
i. In GMM Supplier Portal: PPAP approval status is shown under **Parent, Site Metric** or **Complete Parts Report**.
j. In Global Material Approval (GMA): Non-dimensional materials disclosures including legally complied MSDS or GHS-SDS are performed by clicking on the "**Global Material Approval (GMA)**" link.
k. For training on the GMM Supplier Portal, click the **Help** button to access the user manual.
l. For help with Global Material Approval (GMA) system, the training materials can be accessed through the application by clicking on the  present at the top right corner of the screen. If additional help is needed, please contact gmmhelp@ford.com

Section A1: How to complete RSMS *Confirmation in GMM* Supplier Portal and RSMS *Certification in IMDS* (For Suppliers Utilizing IMDS):

a. **RSMS Confirmation in GMM** means confirming the updated RSMS has been received, read and cascaded down the supply chain. Log into the **GMM supplier portal** and click on RSMS Confirmation. RSMS Confirmations can be done at the GSDB parent or site code levels.
b. **RSMS Certification in IMDS** means confirming all products supplied to Ford are in compliance with the latest standard and is to be completed near the end of each year. Log into **IMDS** at **http://www.mdsystem.com** and click on functions – certification – Ford Motor Company. A 4-digit parent GSDB code must be entered first, this allows the user to then search for specific 5 digit site GSDB codes. Please note that proper access will be needed in order to access the Certification screen. Please contact your IMDS Client Manager for assistance.

Section A2: How to complete RSMS Confirmation and Certification in the GMA Tool (For suppliers of non-dimensional products):

a. RSMS confirmation and certification will be required for every supplier data entry in the Global Material Approval (GMA) Tool.

Section B: Information on accessing the Ford Supplier Portal

1. How to get a Covisint ID and password and register for the Ford Supplier Portal

a. A supplier accessing the GMM Supplier Portal / Global Material Approval (GMA) application must be a member of the Ford Motor Company Global Supplier Database (GSDB). Please contact your internal Ford sales representative for information on your company's GSDB code.
b. The supplier company must be registered in Covisint. Each user must obtain a Covisint user ID and password.
c. If your Company is not registered with Covisint or the Ford Supplier Portal, go to **https://us.register.covisint.com/CommonReg?cmd=REGISTER** and select the **New Top Level Organization** radio button. Follow the registration steps, and make sure to select **Ford Supplier Portal** at the service package screen. When asked to enter the GSDB code, please enter your four digit Parent GSDB code.
For further instructions on registering a company on the FSP, go to https://web.fsp.ford.com/FSP/desk_manual/NAV2222G.htm and follow the instructions associated with the menu item: **Register a company for FSP**.
d. For a new user whose company is registered with Covisint, but who does not have a Covisint User ID and password, go to **https://us.register.covisint.com/CommonReg?cmd=REGISTER** and follow the registration steps, and make sure to select **Ford Supplier Portal** at the service package screen. When asked to enter the GSDB code, please enter your four-digit Parent GSDB code.
For further instructions on registering a new user on the FSP, go to https://web.fsp.ford.com/FSP/desk_manual/NAV2223G.htm and follow the instructions associated with the menu item **Register a User for FSP.**

2. How to get access to the GMM Supplier Portal or the Global Material Approval (GMA) application

a. For instructions on requesting access to an application on the FSP, log into Covisint at **https://fim.covisint.com/ap/ford?TARGET=https://fsp.covisint.com** and follow the **How to request an application** link under the Ford Supplier Portal Key Information section.

3. How to get permissions to the applicable parent/site GSDB code(s) or to request access to additional GSDB code

a. Log in to Covisint **https://fim.covisint.com/ap/ford?TARGET=https://fsp.covisint.com**.

b. Click the **How do I request additional site codes for an application** under the Ford Supplier Key Information Section.

If you have any questions or concerns regarding obtaining access to the GMM Supplier Portal or Global Material Approval (GMA) application on the Covisint website, please contact the Covisint help desk. Global Covisint contact information is available at **https://portal.covisint.com/web/supportauto/contactus/autosupplier**. Please contact suplhelp@ford.com for Covisint related issue.

If you have all required access permissions but still have problems accessing the application please contact **gmmhelp@ford.com**

RESTRICTED SUBSTANCE MANAGEMENT STANDARD **WSS-M99P9999-A1**

1. SCOPE

The purpose of this Standard is to inform suppliers to Ford Motor Company, and Ford personnel, of restrictions pertaining to certain substances in both dimensional and non-dimensional products. By regulation or by Ford direction, these substances shall be restricted or excluded from parts, materials, equipment, packaging, office supplies, machinery and/or tooling, hereinafter referred to as "product(s)", supplied to and/or manufactured by Ford or intended for use in Ford products. This Standard supplements, but does not supersede, the responsibility of each supplier to comply with laws and regulations for the receiving Ford location(s). It is the duty of all Suppliers of products to Ford to comply with this Restricted Substance Management Standard. This document also explains Ford Motor Company's commitment to product compliance, quality assurance, health and safety, and environmental management. **SUPPLIERS' REPORTED DATA WILL BE USED TO PROVE LEGAL COMPLIANCE.**

2. APPLICATION

All products supplied to Ford (all Brands, world-wide) must comply with the latest version of this Standard, regardless of when they were originally approved.

References to "Ford" within this document shall be understood to include all joint venture vehicles that are Ford - or Lincoln - badged, e.g., JMC, ChangAn, Ford Otomotiv Sanayi A.S., Otosan, Sollers OJSC, as well as all Ford fully owned companies, e.g. CNG-Technik GmbH and Lincoln Motor Company.

This Standard is normally reissued (with or without revision) in the first quarter of each calendar year. The applicable version is the document with the current year shown in the revision box - page 1.

The 2022 RSMS reporting timing covers 2022 and forward model years (MY). The timing requirements for prior model year production and service parts are covered by earlier versions of RSMS. Items already reported which contain new substances listed in this revision need to be resubmitted to include these new substances. Suppliers who have not complied with earlier reporting requirements are expected to submit past due information immediately.

3. REQUIREMENTS

Meeting RSMS and its reporting requirements continues to be a requirement of the Production Part Approval Process (PPAP) and part of the Manufacturing Site Assessment, a key element of the Q1 requirements. It is the duty of all suppliers of products to Ford to comply with the requirements of this Restricted Substance Management Standard (RSMS). For vehicle parts - compliance to RSMS is required by the program <PEC> milestone or 8 months before J1, whichever comes first. Please note that although IMDS is a requirement for approval of PPAP, the due date for completed and approved IMDS is the program <PEC> milestone or 8 months before J1, whichever comes first. It should be noted that all non-dimensional materials (e.g., chemicals) and "hazardous articles", which are intrinsically hazardous, or which form or release hazardous substances during use, recycling, or disposal (e.g., "dry" friction materials, welding rods or wires, solders, heat resistant materials), are subject to separate detailed evaluation and approval by Ford Toxicology and the Environmental Quality Office (EQO) in addition to the requirements of this Standard. This approval must be completed through the Global Material Approval (GMA) Process prior to supplying product to Ford. Details of this process and any brand-specific direction can be obtained by contacting the appropriate regional Toxicology or Environmental Quality Office (EQO).

Date	Action	Revisions	
2022 04 01	Revised	2022	K. Keller
2021 04 01	Revised	2021	K. Keller
1984 01 11	Activated		E. Rezendes

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3.1 INSTRUCTION APPLYING TO ALL PRODUCTS SUPPLIED TO FORD MOTOR COMPANY

Section 3.1 relates to general requirements affecting all products supplied to Ford. Restricted substance categories are alphabetically listed, with the type of restriction indicated, in Attachments 2 and 3, and are also referred to indirectly on a hazardous properties basis. Ford Motor Company requires suppliers to declare ALL dimensional and non-dimensional substances if present at or above 0.1 % (weight percent). Where suppliers are required to declare substances below 0.1%, those substances will be specifically listed in the RSMS/RSL for enhanced disclosure. In addition, all prohibited substances are required to be declared at the detection limit, these substances will not be listed separately in the Declarable Section of the RSL. See section 0.2 of Attachments 2 and 3 for declaration requirement.

3.1.1 Paragraph Deleted. Refer to Section 4.

3.1.2 Provision of Data on the Chemical Composition: In addition to information required for compliance to this Standard, supplier, upon request, shall provide the composition (chemical identity of each constituent and its proportion by weight) of products supplied or proposed to be supplied and all TOXICITY, HEALTH, SAFETY, REGULATORY REPORTING, and DANGEROUS GOODS TRANSPORTATION data/guidance to the requesting Ford Toxicology and the Environmental Quality Office. **Prior to making any change to the composition or hazard labeling of such products, the supplier shall advise the regional Ford Toxicology and Environmental Quality Office.**

3.1.2.1 Ford Motor Company requires disclosure of the Confidential Statement of Formula (CSF) of all substances within all non-dimensional materials and hazardous articles at or above 0.1 % w/w in order to meet Health, Environmental regulatory reporting and internal requirements, unless specified at a lower mass percent in the Ford Restricted Substances Management Standard and List (Attachments 2 and 3 & RSL, respectively) or in the requirements for Toxicology evaluation and the approval of materials, as mentioned in Section 3 - Requirements of this Standard.

3.1.2.2 Submission of a mixture / compound composition report should list all chemical ingredients present at or above 0.1 % w/w unless chemicals reportable at levels below 0.1 % w/w are otherwise specified by the Ford Restricted Substances Management Standard and List (Attachments 2 and 3 & RSL, respectively). Use exact component percentages where possible. Where concentration ranges are necessary, they should be no broader than 10 % (e.g. 0 - 10 %, 5 - 15 %, 20 - 30 %). Composition will either total exactly 100 %, or the sum of the minimum ranges must be less than 100 % but no less than 85 %, and the sum of the maximum ranges must be greater than 100 % but no more than 115 %. Where ranges are given, they must reflect true possible values, and must be justifiable (e.g., cases of feedstock / supply-base variability) upon request. Classification and labeling of materials will be based on the upper maximum of the range stated for each component. Confidential formulation data submitted through the supplier portal will be held under the FORD Global Terms and Conditions (GTC).

3.1.2.3 North America Production Materials: Suppliers are now required to submit all three North American country languages (NOM STPS Spanish, OSHA English, WHMIS English and WHMIS French) with each data submission in the Global Material Approval (GMA) application.

3.1.2.4 For Ford North America Aftermarket Products, please refer to the Data Quality Requirements for Ford North American Operations, Post Production Materials.

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3.1.3 Non-dimensional production material intended for service use – Ford Customer Service Division (FCSD)

3.1.3.1 **Legal (regulatory) requirements:** The manufacturer and other involved suppliers are required to fully meet FCSD internal and all external regulatory requirements applicable to **all of the regions/countries in which a non-dimensional production material will be required for service use**. Either as a stand-alone service product or a component (grease, lubricant, etc.) package included in a service kit (Brake pads, Driveshafts, Tire mobility, etc.)

These requirements include providing all information/data to FCSD and executing supporting actions:

- necessary to enable FCSD to perform post-production material reviews and create required compliance documentation, including (Material) Safety Data Sheets and labeling statements/labels
- associated with regional and national substance registration
- necessary to enable FCSD to conduct any required product registration and notification
- required to support any other service chemical-specific regulatory requirements

3.1.3.2 **Regional availability and other service-specific requirements:** In regards to regional availability and other service-specific requirements, the manufacturer and other involved suppliers are required to:

- ensure availability of the material for each region in which a component or vehicle is sold and/or serviced
- offer the material in an appropriate set-up (e.g., FCSD brand, container size, order quantity) independent of the yearly service volumes
- provide a material with a shelf life of > 24 months
- support a service lifetime up to 15 years once a vehicle is out of production
- Contact your regional FCSD representative listed in Appendix 2

3.1.4 Provision of Data for Environmental Control Support**:** Supplier, upon request, shall disclose information for assessment of disposal or effluent treatment if product constituents are anticipated to be released into AIR, WATER OR SOIL, or require special declaration or control.

3.1.5 Assurance of Compliance: All products shall be supplied in compliance with the regulations on substance REGISTRATION, NOTIFICATION OF NEW CHEMICALS/SUBSTANCES, PACKAGING AND LABELING which are in place in the Ford receiving location(s) where the products are supplied. Prior to shipping any product to any Ford location, suppliers shall ensure that products continue to have existing Ford approval in the country of use, consistent with the Global Material Approval (GMA) process. Existing approval confirmation can be determined via the Global Material Approval (GMA) system (https://fim.covisint.com/ap/ford?TARGET=https://www.gma.ford.com/).

3.1.6 Products Containing Dangerous Substances: Non-dimensional materials (e.g., chemicals) and "hazardous articles" that contain substances which have been identified as having any CARCINOGENIC, MUTAGENIC, REPRODUCTIVE TOXICITY, ECOTOXICITY, or SENSITIZING PROPERTIES (see Definitions, Appendix 1) shall not be supplied without prior notification of these characteristics to Ford Motor Company. (e.g., via the Global Material Approval (GMA) process, where applicable, at https://fim.covisint.com/ap/ford?TARGET=https://www.gma.ford.com/

3.1.7 Suppliers shall aim to reduce or replace carcinogenic, mutagenic, reprotoxic or persistent, bioaccumulative and toxic (PBT) substances in the products they supply to Ford.

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3.1.8 Some US States and EU countries are implementing bans on selling products with micro beads (soaps, etc.); therefore, these products shall not be supplied to Ford Motor Company.

3.1.9 Products of or from endangered species must not be supplied to Ford Motor Company in any form.

Products of or from endangered species includes any substance or material that originates from an endangered species. Lists of endangered species include:

1) Latest International Union for Conservation of Nature and Natural Resources (IUCN) Red List of Threatened Species http://www.redlist.org/
2) European Union (EU) Regulation 338/97 on the protection of species of wild fauna and flora by regulating trade therein and its amendments.
3) United States Endangered Species Act.
4) United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC) Species Database http://www.unep-wcmc-apps.org/species/dbases/about.cfm.
5) Additional list of Endangered Species Laws by Country http://www.endangeredearth.com/endangered-species-laws-u/

3.1.10 Submission of the Supplier Restricted Substance Information: Suppliers of facility machinery, equipment and/or tooling (e g., conveyers, presses etc.), that contain any of the substances listed in Attachments 2 and 3 as "prohibited" must submit the Supplier Restricted Substance Information Reporting Form (Appendix 3 – Reporting Matrix) and conform to section 4.6.1 prior to shipment to Ford.

3.1.11 Notification of the Responsible Ford Activity: Without notification and acknowledgement from the appropriate Ford Motor Company Materials & Standards Engineering activity, suppliers shall not supply products containing substances that will, in use, adversely affect the vehicle interior with respect to human health including allergic reactions.

Ford Motor Company will provide electronic acknowledgment(s) to the submitter:
1) Verifying receipt of the suppliers' submission(s) to IMDS (International Material Data System) and Global Material Approval (GMA) (where applicable),
2) Compliance or non-compliance of the data therein to the WSS-M99P9999-A1 and
3) Receipt of their certification of compliance with WSS-M99P9999-A1.

3.1.12 Instruction for Radioactive Products: Radioactivity contamination should meet "Unconditional Use Clearance Level" requirements consistent with International Atomic Energy Agency (IAEA) and the Commission of European Communities (CEC) standards for individual radionuclides IAEA-TECDOC-855 (1996) & Safety Series RS-G-1.7 (2004).

http://www-pub.iaea.org/MTCD/publications/PDF/te_855_web.pdf
http://www-pub.iaea.org/MTCD/publications/PDF/Pub1202_web.pdf

Note: Radioactive sources or devices used in manufacturing processes are exempted.

For additional radiation protection information see document Radiation Protection 122 (2000 and 2002, respectively).

http://www.orau.org/ptp/PTP%20Library/library/International/EuropeanCommission/122_part1_en.pdf
http://www.orau.org/ptp/PTP%20Library/library/International/EuropeanCommission/122_part2_en.pdf

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3.1.13 Instruction for Timber Products: All timber products must be sourced from forests that comply with one of the following requirements:

- Certified under the "Forest Stewardship Council' or the "Programme for the Endorsement of Forest Certification Schemes" or
- Declared as sourced from plantation or recycled timber or Licensed under the FLEGT system (EU Action Plan for "**F**orest **L**aw **E**nforcement, **G**overnance and **T**rade).

3.1.14 Prohibition of Re-usage: Re-use is prohibited for those parts (e.g., air bags, seats, inflators, etc.) listed in Annex V of the European Directive 2005/64/EC in the construction of vehicles covered by the European Directive 70/156/EC.

3.2 SUBSTANCE RESTRICTIONS (as identified in Attachments 2 and 3)

3.2.1 Substance Restrictions are identified in Attachments 2 and 3 by substance or regulatory category, type of restriction, threshold limit (where applicable), applications affected/exempted, and effective dates. All substances covered by Attachments 2 and 3 must be reported.

3.2.2 Substances designated as "Prohibited", (P), shall not be supplied in any products, subject to the stated directions on content threshold and affected applications. A maximum concentration value of 0.1% (by weight) of the homogeneous material shall be tolerated for these substances, unless otherwise subject to lower threshold limits, as specified by this Standard and the RSL. All RSMS/RSL listed substances which are intentionally added must be reported, and, where specified, also when not intentionally added (see Attachments 2 and 3).

3.2.3 Substances are designated, as "Declarable", (D), when present in a material or part in a vehicle, and are legally regulated, projected to be regulated, or required to be tracked for information gathering purposes.

3.2.4 For the purpose of this standard, monomers remaining in cured polymeric articles (including paints) are residual content and not considered "intentionally introduced". If prohibited substances conflicting with the above definition are identified in products supplied to Ford Motor Company, they must be reported (See Reporting Matrix – Appendix 3) and suppliers must institute immediate corrective measures. See special requirements for post-consumer recyclate (PCR) materials. The substance need not be reported at less than 0.1 % by weight per homogeneous material, unless subject to explicit threshold content limits specified by this Standard. Thresholds for heavy metals are to be calculated on the basis of the elemental form of the metal.

3.2.5 Specific Chemical Abstracts Service (CAS) numbers for substances listed in this Standard affecting vehicle parts are illustrated in the current Global Automotive Declarable Substance List (GADSL, **http://www.gadsl.org**), also available on the "Ford Supplier Portal" (FSP) at: <https://fsp.portal.covisint.com/web/portal/home>. Additional CAS-identified substances listed in this Standard affecting non-dimensional material (chemical products) and "hazardous" articles will be available in the RSL in Global Material Approval (GMA) under Covisint home page as below (https://fsp.portal.covisint.com/documents/106025/25131282/RSL.pdf/e4fbd426-b30d-4276-a7f6-123d12a8a468)

Or, search for the RSL document by login to Covisint and in home page -> GMM-Training Materials -> RSL

It is the supplier's responsibility to ensure that they identify all affected substances - some of which may not be specifically identified in the GADSL or in the Global Material Approval (GMA) application.

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3.2.5.1 Confidential or trade secret chemicals that are RSMS listed substances must be disclosed to Ford Motor Company by CAS Number. Other substances not listed in the RSMS, accompanying RSL (Restricted Substance List) and/or GADSL lists that are confidential or trade secret chemicals that are subject to regulation must be disclosed by confidential accession number of the chemical inventory list applicable to the country in which the product will be sold/used. Inventory List examples: Toxic Substances Control Act (TSCA) uses Pre-manufacture Notice numbers in association with EPA accession numbers to denote registration of confidential chemicals on the US chemical inventory list. The Canadian Chemical Inventory List is the Domestic Substances List, and its accession numbers are referred to as DSL Accession numbers.

3.2.5.2 The Ford Restricted Substance List (RSL) includes the most complete list of declarable and prohibited CAS Numbers available at the time of this publication. Please contact cshafer7@ford.com to request the full Ford Restricted Substances List (RSL). Note: Supplier is responsible for determining if additional CAS Numbers contained in the product are subject to the substance categories. For suppliers who report confidential content through the Global Material Approval (GMA) application, a PDF of the RSL is available.

3.2.6 This Standard identifies substances and applications that are currently prohibited, as well as some that will become prohibited at a specified future date. To avoid unnecessary re-design/testing, new production parts must comply with these future prohibition requirements during **engineering validation gateways** based on GPDS (Global Product Development System) program requirements. If engineering validation of new production parts meeting the future prohibition requirements will not be possible, concurrence by the relevant Program Team and appropriate Materials Engineering function will have to be sought. This concurrence does not affect the requirement for all components to comply with the substance dates shown in the Ford RSL.

3.2.6.1 The production and use in mixtures of substances contained in the List for Authorization (Annex XIV REACH Regulation 1907/2006 or UK REACH) will be prohibited after they have reached their individual sunset dates. FORD drives for phasing out those substances in mixtures as well as in articles by their sunset dates. In case no suitable substitute is available for the Annex XIV substance, the supplier needs to obtain approval from the Ford Global Material Compliance Group, who will determine the acceptance for continued use of the substance. The prerequisite to produce the substances or use in mixtures in EUROPE (EEA & UK) is that the supplier must provide documentation about an application for or a valid authorization or about an already granted authorization for the intended use of the substance.

3.2.7 For production parts, unless otherwise noted, the Effective Date column of the RSL reflects "Put on the Market" dates. This normally reflects when products are delivered to the distribution area (left the assembly facility) and a transfer of ownership occurred. For products imported to regions implementing the EU End of Life Vehicle Directive, these dates reflect customs clearance dates in these regions. Suppliers shall supply the new parts without the prohibited substance 6 months before this date.

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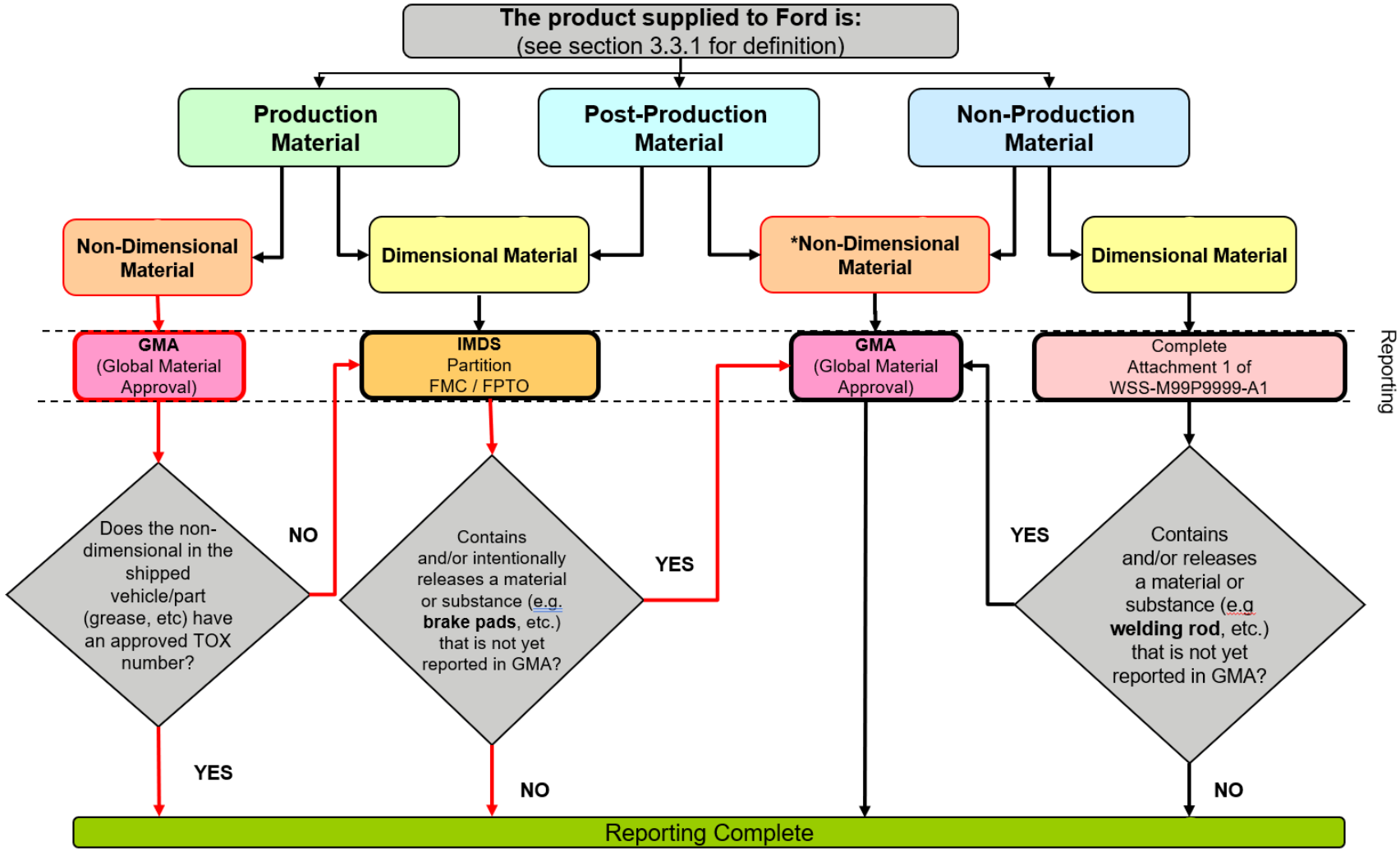
3.3 Reporting Pathways

This flowchart explains the reporting process for materials.



COVISINT Global Material Approval (GMA) Application: https://fim.covisint.com/ap/ford?TARGET=https://www.gma.ford.com/
IMDS Website: https://www.mdsystem.com/imdsnt/
Note: For more detailed reporting explanations and examples see Appendix 3 and the RSMS Reporting Requirements document
*Not all regions use Global Material Approval (GMA) for post-production non-dimensional materials, please contact Regional FCSD Post Production contact person in Appendix 2 for guidance

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3.3.1 Definition of Materials

Material
Material within the text of this Standard means the primary medium that may contain a "substance", which is restricted by this Standard, such as a friction material (e.g. clutch or brake pad) containing lead sulfide. Acceptable material descriptions are Industry standards or Ford Motor Company standards/specifications. Where these are not available to define the material, a supplier's standards/specification may be used.

Dimensional Material
Dimensional materials are those having their own shape and are essentially solid. Most are considered "articles" (See definition of "Article"). Examples of these materials would include assemblies, components, semi-components and hard parts. Note that some dimensional materials (e.g. dry friction materials, steel, steel alloys, etc.) are "hazardous articles" and can release hazardous non-dimensional substances during/after processing, and would be subject to reporting obligations of section 4.6.2 and may require a TOX number.

Non-Dimensional Material
Non-dimensional materials are those that have no intrinsic shape without containing structure. Examples of these materials are fluids, gases, powders and semi-solids (pastes) like adhesives, greases, paints, bulk chemicals, and separately packaged chemicals in post-production service kits.

Non-Production Material
A dimensional or non-dimensional material used in Ford facilities which does not remain on products marketed by Ford.

Post-Production Material
A dimensional or non-dimensional material that is used to service a vehicle after it exits the assembly plant.

Production Material
A dimensional or non-dimensional material which becomes part of a product marketed by Ford.

Non production with Production Impact
Materials that are raised as Non-Production materials but have a production impact.

4. RESTRICTED SUBSTANCE AND RECYCLED CONTENT REPORTING

FOR THE REPORTING OF SUBSTANCES CONTAINED IN PRODUCTION PARTS (INCLUDING SERVICE PARTS), FORD MOTOR COMPANY SUBSCRIBES TO THE GLOBAL AUTOMOTIVE DECLARABLE SUBSTANCE LIST (GADSL, http://www.gadsl.org). ADDITIONAL OR MODIFIED REQUIREMENTS TO THE GADSL LIST ARE CONTAINED IN ATTACHMENTS 2 AND 3 AND THE RSL.

4.1 ELECTRONIC REPORTING USING THE INTERNATIONAL MATERIAL DATA SYSTEM (IMDS) (URL: http://www.mdsystem.com/)

ALL PARTS AND MATERIALS REMAINING ON A VEHICLE AT POINT OF SALE AND ALL SERVICE PARTS ARE REQUIRED TO BE REPORTED USING IMDS.THIS INCLUDES ANY MATERIALS OR SUBSTANCES THAT MAY BE ADDED DURING CERTAIN PROCESSING OPERATIONS.
Suppliers are required to meet the reporting deadlines for production and service parts consistent with the Global Production Development System (GPDS). Product data submissions should begin immediately to support vehicle program timing and should be completed by the reporting deadlines**.**

Based on the deactivation of IMDS REC019 suppliers are requested to report electronics in a more detailed approach following the “once an article, always an article” structure. Please see the IMDS FAQ regarding the REC019 deactivation here for more details.

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Full IMDS reporting and full compliance with this Standard must be achieved by the program <PEC> milestone or 8 months before J1, whichever comes first. Components for Powertrain programs, which follow Powertrain Unit GPDS program timing, must achieve full IMDS reporting and full compliance with this Standard at the Unit Tool Development gateway <Unit TD> or 8 months before Powertrain Job 1.

4.2 REPORTING USING THE CHINA AUTOMOTIVE MATERIAL DATA SYSTEM (HTTP://WWW.CAMDS.ORG/)

ALL PARTS AND MATERIALS REMAINING ON CHINA LOCALLY PRODUCED VEHICLES AT POINT OF SALE AND ALL SERVICE PARTS ARE REQUIRED TO BE REPORTED USING CAMDS

FOR DETAILS REGARDING CAMDS REPORTING, PLEASE REFER TO THE CHINA CAMDS REPORTING REQUIREMENTS OF THE REPORTING REQUIREMENTS SECTION.

4.3 SUBSTANCE DISCLOSURE IN IMDS

All substances contained in "The Global Automotive Declarable Substance List" (GADSL), MUST be disclosed in IMDS, along with any additional or modified requirements specified in Attachments 2 and 3 **and the associated RSL.**

- ALL SUBSTANCES IDENTIFIED IN THE GADSL AS MODIFIED/ENHANCED BY THIS STANDARD MUST BE IDENTIFIED WITH THE CORRECT CAS NUMBER WHEN REPORTED IN IMDS (except some Fibers which are not reported by CAS number).
- The use of non-CAS identified substances is acceptable for the reporting of substances NOT covered in the GADSL AS MODIFIED/ENHANCED BY THIS STANDARD.
- Paints, polymers, adhesives and sealants etc. must be reported in the **cured state.**

Substances listed in RSMS Attachments 2 and 3 and the RSL (which includes GADSL substances) **must not be** marked or reported as "confidential" or "secret" when reporting in IMDS. Please note that Ford Motor Company now requires suppliers to declare ALL substances if present at or above 0.1 % (weight percent). Where suppliers are required to declare substances below 0.1%, those substances will be specifically listed in the RSMS Attachments 2 and 3 for enhanced disclosure. Only **specific** substances listed in Attachments 2 and 3 and GADSL cannot be marked or reported as "confidential" or "secret" when reporting in IMDS. Please follow all IMDS recommendations and RSMS guidelines when utilizing "confidential" or "secret" reporting.

4.4 REQUIREMENTS FOR IMDS REPORTING INCLUDING SPARE PARTS

All Production parts must be reported under the submission for the Tier 1 assembly, using the OEM released part number. If you supply Tier 2 (or Tier n) parts, this data must be sent to your customer. It is recommended that you use IMDS for data transfer of parts throughout the supply chain.

Service part information is required to be reported individually, per their assigned Ford Engineering number. The majority of service parts are common with production parts; however, service level details may require additional part reporting information. For production end item assemblies, the service component parts that make up that assembly **MUST** also be reported by their respective engineering numbers, in accordance with Sect. 4.0 of this Specification. Ford Customer Service Division (FCSD) will require RSMS certification of all service parts and components prior to distribution of these parts.

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Service unique parts are also required to be reported. Service unique parts consist of:

1) Those parts sold and released by FCSD/PD, and usually, not common with production, (i.e., remanufactured components, service chemicals, etc.).
2) Those parts sold by FCSD and released by FCSD/PD, and common with production, although the end item part number isn't supplied for production (i.e., service kits containing component production parts to service production assemblies, filters, etc.).

Spare parts for servicing vehicles put on the market ***prior to*** 1 July 2003 containing Lead, Mercury, Cadmium and Hexavalent Chromium are exempted from complying with the material restrictions and reporting requirements, **except, for wheel balance weights, carbon brushes for electric motors, brake linings and convenience light switches**, which are still required to be reported and compliant (see Attachments 2 and 3 for countries outside North America and Japan not following EU ELV Directive). **Remanufactured and re-used service parts** are exempted from the Lead, Cadmium and Hexavalent Chromium prohibition requirements of this Standard, provided they were already on the market at the expiry of the exemption. All new materials used in the refurbishment of these parts MUST comply with the substance restrictions contained within this standard. Reporting requirements for spare parts, remanufactured and re-used service parts still apply if required by local or governmental law (e.g. European Union REACH Regulation).
For further reporting requirements please refer to the section "Substance and Materials Reporting and Compliance" in the Ford Global Terms and Conditions (GTC). Ford GTC can be found at: https://web.fsp.ford.com/gtc/index.jsp (this link requires access to the Ford Supplier Portal through Covisint).

California Proposition 65 Warning Labels- Under the Proposition 65 law and regulations, warnings are required for consumer service products that pose anticipated exposures to Proposition 65 substances above designated threshold levels, i.e., exposures that likely exceed respective "No Significant Risk Levels" (NSRLs) and/ or "Maximum Allowable Dose Levels" (MADLs). The mere fact that a product "contains" a Proposition 65 substance does not necessarily mean that there is a risk of exposure to the consumer at a level requiring a Proposition 65 warning label.

If a supplier believes a service part or other product requires a California Proposition 65 warning, it must obtain Ford approval for the warning label before applying it the product, packaging, or carton master pack (including inserts). Requests for approval should include any related data or information about the potential for exposure to a Proposition 65 substance resulting from a consumer's handling or use of the product. Request an approval by sending an email note to: FCSDOEHS@FORD.COM

Bailment/Consignment Parts - The bailment supplier (bailee) has the responsibility to submit IMDS data for all end item assembled part numbers to Ford Motor Company account 102. The bailment supplier (bailee) must collect all necessary IMDS data for the components from the component suppliers in order to complete the IMDS requirement. Component suppliers are required to submit IMDS to the bailment supplier (bailee). If the component part is a Ford end item part number, the component supplier is required to submit IMDS to both the bailment supplier (bailee) and Ford Motor Company account 102 via the "Propose" option in IMDS.

4.5 RECYCLED CONTENT REPORTING IN IMDS

Recycled content percentage may be entered in IMDS in semi (components) for material references in classifications 1.x-4.x Metals, 5.x Polymers, 7.1 Organics, and 7.2 Glass/Ceramics. Recycled content is reported in percentage ranges. The IMDS system will create a check warning if the min and max values of the range exceeds 20%.

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4.6 PARTS AND MATERIALS THAT REQUIRE DISCLOSURE BY OTHER METHODS (NOT IMDS):

4.6.1 Facility equipment, tooling, packaging and office materials.

Suppliers of facility equipment, machinery and tooling **(**e.g., conveyers, presses etc.), packaging materials, office materials and any sub-components contained therein, **must ensure** that their products supplied to Ford containing substances that are listed in Attachments 2 and 3 of this Standard **are reported** to Ford for resolution, using the *Supplier Restricted Substance Information Reporting Form* (Attachment 1) if any of the following conditions exist for the product(s) and it's sub-component(s):

- Part comes into direct contact with EMPLOYEE as a matter of routine use,
- Part comes into contact with any material/part integral to the vehicle or other equipment that does so { i.e., affects MARKET(s) }
- Part is a MAINTENANCE part that is periodically replaced and disposed,
- Part contains any substance or material that is/are prohibited in the region/location receiving the equipment.

The supplier must also notify (by email) the **requester** (noted on the purchase order) and the **purchasing buyer** of any facility equipment, machinery, and/or tooling using any of the Restricted Substance List substances meeting any of the preceding conditions. Products containing such substances shall not be shipped to Ford until a signed acknowledgement is received by the supplier, from the **Ford Global RSMS Program Manager,** who will also communicate the acceptance and/or any issues with the information reported by the supplier to the Ford Motor Company manufacturing activity requesting the facility equipment and/or tooling.

To fulfill the EU legislation EC 1907/2006 "REACH" or UK REACH, suppliers are required to send information on articles that contain > 0.1% of Substances of Very High Concern (SVHC). The information sent *should* include safe use instructions and must contain the substance name. This information must be sent to REACHREP@ford.com. This mailbox must be used to report all articles that have substances present in the RSMS list above 0.1 % per article.

4.6.2 Non-dimensional materials

Suppliers of non-dimensional materials, which are **not associated within Dimensional Products,** and/or hazardous articles, are subject to the restriction requirements of this Standard (RSMS). Substances listed in this Standard and highlighted in sections 3.1.5 must be reported (e.g., through the Global Material Approval (GMA) system). Non-dimensional materials for which full disclosure of RSMS-listed ingredients has been supplied to Toxicology and EQO according to Section 3.1.2 of this Standard, do not require additional reporting, (e.g., in IMDS) and will be certified through the Global Material Approval (GMA) system, where applicable.

- ALL SUBSTANCES IDENTIFIED IN THIS STANDARD (SEE RSL) MUST BE IDENTIFIED WITH THE CORRECT CAS NUMBER WHEN REPORTED IN GLOBAL MATERIAL APPROVAL(GMA).
- If a supplier reports an RSMS substance without the correct CAS number, they will NOT be fulfilling the requirements of this Standard.
- Confidential or trade secret chemicals that are subject to regulation must be disclosed by Canada DSL or US EPA Accession number.
- Paints, polymers, adhesives and sealants etc. must be reported in the **non-cured state.**
- Substances listed in this Standard (RSMS Attachments 2 and 3 and RSL) **must not be** marked or reported as "confidential" or "secret" when reporting in Global Material Approval (GMA).
- **An update of existing Global Material Approval (GMA) data is required if there are changes in**:

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- Formulation and/or weight percent of RSMS listed substances (see MSDS Guidelines in Global Material Approval (GMA): https://fim.covisint.com/ap/ford?TARGET=https://www.gma.ford.com/
- Product name changes must be disclosed to requestor immediately upon occurrence and require a new Global Material Approval (GMA) submittal against a new material request, rather than an update.

4.6.3 "Hazardous articles" **that do not remain on a vehicle at point of sale,** do not require disclosure in IMDS, but may require disclosure per section 4.5.2 if article becomes friable or otherwise releases hazardous substances during processing. These articles may also require a TOX number.

"Non-dimensional materials found in or on articles" **used in a Ford facility** or **that do not remain on a vehicle at point of sale,** do not require disclosure in IMDS, but may require disclosure per section 4.5.2 if known or reasonably anticipated to pose a health or environmental hazard during normal handling, use, service or disposal, or if otherwise regulated. These materials may also require a TOX number.

4.6.4 Packaging Materials and Other Non-production Hard Parts (office supplies, etc.)

Same REACH rules apply as described in 4.6.1. Please note that packaging material is considered as an article under the REACH regulation.

4.7 PARTS AND MATERIALS THAT REQUIRE REPORTING BOTH IN IMDS AND GLOBAL MATERIAL APPROVAL (GMA)

Non-dimensional materials contained within dimensional products that are reported in IMDS may require further reporting via Global Material Approval (GMA). Greases, lubricants, rust preventives, as well as paints, adhesives and sealants, etc. must be reported if known to or reasonably anticipated to have exposure to the customer, pose a health or environmental hazard during normal handling, use, service or disposal, or otherwise require reporting due to environmental regulation (in the as received or uncured state). Also, some "hazardous articles" (e.g., dry friction materials such as brake and clutch pads) are required to be reported via both processes.

4.8 CERTIFICATION

4.8.1 IMDS Parts Certification

For parts that are required to be reported in IMDS according to section 4.1, the **Ford Certification page must be completed in IMDS by December 31, 2022**. It is the supplier's responsibility to assure that the person certifying is of the appropriate authority for the supplying company.

By certifying in IMDS, suppliers are giving an assurance that they have done proper due diligence to ensure that their parts are in compliance with the substance prohibitions in this version of the Ford Restricted Substance Management Standard (WSS-M99P9999-A1).

To be able to perform the Ford Motor Company Certification in IMDS, the appropriate user must have a "Certifier" profile set up in their IMDS account. This profile is assigned by the suppliers "IMDS Client Manager".

4.8.2 Non-dimensional Materials Certification

All non-dimensional production material suppliers must certify compliance to RSMS in Global Material Approval (GMA) with every data submission. Certifiers must have access to the Covisint website. By certifying RSMS in Global Material Approval (GMA), the supplier is taking the responsibility that their materials comply with the requirements in the latest issue of the RSMS.

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If suppliers have both non-dimensional materials and dimensional materials (parts), the suppliers must certify in both the IMDS and Global Material Approval (GMA) sites. **Suppliers that are not registered for Covisint and/or do not have access to the "Ford Supplier Portal"** should do so immediately using https://us.register.covisint.com/CommonReg?cmd=REGISTER to register for Covisint. Follow the registration steps, and make sure to select "**Ford Supplier Portal**" at the service package screen. When asked to enter the GSDB code, please enter your four-digit Parent GSDB code.

5. GENERAL INFORMATION

5.1 A glossary of terms is provided in Appendix 1.

5.2 Additional information may be obtained through the contacts shown in Appendix 2.

5.3 Matrix to clarify the appropriate reporting mechanism for suppliers concerning material and substance content reporting is provided in Appendix 3.

5.4 Because GADSL was developed to only address dimensional products (materials) used in production, divergences exist between the RSMS and GADSL. The RSMS covers requirements for both dimensional and non-dimensional materials. For this reason, the RSMS has been improved to separate out restriction and declaration requirements for dimensional and non-dimensional materials. Please see Attachment 2 for substance requirements related to dimensional products. Please see Attachment 3 for substance requirements related to non-dimensional products. If you would like to see the full combined list for all products, you can request the full Restricted Substance List by contacting cshafer7@ford.com.

Please note that any PII (Personally Identifiable Information) that you provide in IMDS and the GMM Supplier Portal to Ford Motor Company will be stored and processed in Ford of North America (Dearborn, Michigan).

5.5 All suppliers are required to provide substance notification or meet material reporting requirements according to reporting rules such as the US EPA TSCA Inventory Notification (Active/Inactive) Rule, EU REACH Communication Rule (§ 33), Canadian Domestic Substances List, and the Stockholm Convention.

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APPENDIX 1
Glossary of Terms

These terms are used by Ford in this Standard in the sense of following examples of legal definitions, not excluding other legally binding definitions:

ARTICLE Definition Examples:

The definition provided by the US Occupational Safety and Health Administration (OSHA):
Definitions. Article means a manufactured item other than a fluid or particle: (i) which is formed to a specific shape or design during manufacture; (ii) which has end use function(s) dependent in whole or in part upon its shape or design during end use; and (iii) which under normal conditions of use does not release more than very small quantities, *e.g.*, minute or trace amounts of a hazardous chemical (as determined under paragraph (d) of this section), and does not pose a physical hazard or health risk to employees.

The definition provided by TSCA:
a manufactured item:
(1) which is formed to a specific shape or design during manufacture,
(2) which has end-use function(s) depending in whole or in part upon its shape or design during end use, and
(3) which has either no change of chemical composition during its end use or only those changes of composition that have no commercial purpose separate from that of an article, and that results from a chemical reaction that occurs upon end use of other chemical substances, mixtures, or articles.

The definition provided by ECHA – See Section 2 of the Guidance Document:
https://echa.europa.eu/documents/10162/23036412/articles_en.pdf/cc2e3f93-8391-4944-88e4-efed5fb5112c

Please note: The definition of articles can vary from regulation to regulation, these examples are only to be used as a guide. Always follow specific regulation guidelines.

BIOCIDES:

Additives intended to prevent or restrict microbiological growth.

CARCINOGENS:

Carcinogens are substances, mixtures and materials that have the potential of causing cancer by exposure through any route and/or those classified as carcinogens by any applicable regulation. Examples (not comprehensive):

1) Any member of Group 1, 2A, or 2B in the latest edition of Monographs of the International Agency for Research on Cancer (IARC).
2) Any "select carcinogen" listed by the United States Occupational Safety and Health Administration (refer to 29 CFR Part 1910, Subpart Z, Toxic and Hazardous Substances).
3) Any "known carcinogen" or substance "reasonably anticipated to be a carcinogen" by the United States National Toxicology Program (NTP) in the latest edition of Annual Report on Carcinogens.
4) Any "A1", "A2" or "A3" carcinogen listed by the American Conference of Governmental Industrial Hygienists (ACGIH) in the latest edition of *Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices*.
5) Any substance/mixture listed as carcinogen in EU – CLP Regulation No. 1272/2008 Annex VI
6) Any chemical known to the State of California to cause cancer, pursuant to The Safe Drinking Water and Toxic Enforcement Act of 1986 ("Proposition 65"), http://www.oehha.ca.gov/prop65.html.

CLASSIFICATION:

DECLARABLE:
Substances are designated "Declarable" (D) when present in a material, or part in a vehicle, and are legally regulated, projected to be regulated or required to be tracked for information gathering purposes. Monomers, catalysts and accelerators remaining in cured polymeric articles (including paints) as residual content need not be reported at less than 0.1% by weight per homogeneous material, unless subject to explicit threshold content limits specified by this standard (e.g. vinyl chloride). Thresholds for heavy metals are to be calculated on the basis of the elemental form of the metal.

Declarable - All = Declarable in all applications above stated threshold

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PROHIBITED:
Substances designated, as "Prohibited" (P) shall not be supplied in any products, subject to the stated directions on content threshold and affected applications. A maximum concentration value of 0.1% by weight of per homogeneous material shall be tolerated for these substances, or subject to specific threshold limits specified by this Standard.

Prohibited - Some = Prohibited in some applications above stated threshold
Prohibited - All = Prohibited in all applications above stated threshold

COMPREHENSIVE MATERIAL CLEARANCE (Approval) (CMC):

Indicates that the material (identified by Ford TOX#) has completed both steps in the material review process, (Regional approval and Local approval) and may be purchased for use at the approved facility(ies)upon its approval.

CONFLICT MINERALS:

"**Conflict Minerals**" means:
(i) Gold as well as columbite-tantalite (coltan), cassiterite, wolframite, or their derivatives, which are limited to tantalum, tin, and tungsten; and
(ii) Any other mineral or its derivatives determined by the Secretary of State to be financing conflict in the Democratic Republic of the Congo or an adjoining country.

The above minerals are termed conflict minerals regardless of where they are mined, processed, or sold.

CONGENER:

In chemistry, congeners are related chemicals, e.g., elements in the same group of the periodic table, or derivatives thereof.

ECOTOXICANTS:

Substances posing recognized hazard to the environment, in general, or to specific ecosystems, including: substances so classified, due to their ecotoxicity, under the provisions of the European EC Regulation 1272/2008 and as classified by ASTM STP 1179, p.34, 1993. Other definitions specific to the country of product sale/use also apply.

EU ELV (End of Life Vehicle) Directive:

European Union Directive 2000/53/EC on ELV's
http://europa.eu/legislation_summaries/environment/waste_management/l21225_en.htm

FIBER:

Unless otherwise indicated in this Standard, a FIBER is defined as a particle that is five micrometers or longer with an aspect ratio of at least 3 to 1.

GPDS:

Global Product Development System - The process tasks and deliverables necessary to develop and launch a vehicle. Team events and milestones are defined to communicate progress at various points throughout the process.

GLOBAL MATERIAL APPROVAL SYSTEM (GMA) SYSTEM:

The Global Material Approval (GMA) system:
https://fim.covisint.com/ap/ford?TARGET=https://www.gma.ford.com/

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HAZARDOUS:

Hazardous substances/mixture/materials are those that have the capacity of producing human injury or illness by exposure through any route, by creating an adverse effect upon the environment, and/or those defined and listed by any applicable (i.e., Health and Safety, Environmental, and Transportation) regulation.

HOMOGENOUS MATERIAL:

The physical definition of homogeneity is: the quality of having all properties independent of the position. The compositional homogeneity of any material means: the chemical composition is the same for all substances forming or being an ingredient of the material (e.g., impurities) at any spot of measurement. The opposite: an inhomogeneous material is composed in a way that the amount of the chemical ingredients is dependent on the spot of measurement.

INTENTIONALLY INTRODUCED:

Deliberately utilized in the formulation of a material or component where its continued presence is desired in the final product to provide a specific characteristic, appearance or quality. The use of recycled materials as feedstock for the manufacture of new products, where some portion of the recycled materials may contain RSMS-listed substances, are not to be considered as intentionally introduced unless specified by regulation (e.g., sales/use of products in Canada).

MUTAGENS:

Any chemical that can produce a genetic mutation, i.e., an induction of DNA damage, or changes in chromosome structure or number, including: substances/mixtures classified as Category 1, 2 or 3 mutagens under the provisions of the EC CLP Regulation 1272/2008 (Classification, Packaging and Labeling of Substances and Mixtures).

NANOMATERIAL:

Nanomaterials of interest are those which have structured components with at least one dimension less than 100 nm down to 1 nm, because it is in this range (particularly at the lower end) that materials can have different or enhanced properties compared with the same materials at a larger size. Materials that may be smaller or larger than the nanoscale in all dimensions and exhibit one or more nanoscale property are also considered nanomaterials. These properties, which are attributable to size and their effects, are distinguishable from the chemical or physical properties of individual atoms, individual molecules and bulk material.

NEW PRODUCTION PARTS:

Newly drawn parts that are not in current production or carried over from another vehicle. Parts that are not considered new parts if only the part number changes, in line with current practices (i.e. the prefix changes to accommodate a model year change, or the suffix changes to accommodate a minor engineering change of a current part).

OZONE DEPLETING SUBSTANCES (ODS):

Ozone Depleting Substances (ODS) - are defined as chemicals that have been linked to the depletion of the stratospheric ozone layer, and restricted under the 1987 Montreal Protocol, listed by U.S. Environmental Protection Agency regulations under 40 Code of Federal Regulations, Part 82, Appendix F to Subpart A, and addressed by the European Union Directive-1005/2009/EC, chemicals are collectively identified as ozone depleting substances (ODSs) and include CFCs (chlorofluorocarbons), HCFCs (hydrochlorofluorocarbons) and several brominated-carbons including Halons.

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PAH (Polycyclic-aromatic hydrocarbons):

Regulations prohibiting the use of PAH include EU-R 1907/2006 and its amendments and Directive 2005/69/EC:
http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2005:323:0051:0054:EN:PDF and
http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:328:0069:0071:EN:PDF
https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:164:0007:0031:EN:PDF
https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013R1272&from=EN
https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:JOL_2015_058_R_0005&from=EN

These limits are regarded as kept, if the PAH extract is <3% by mass, as measured by the Energy Institute standard EI-346.

PERCENT (%) BY WEIGHT (of a substance contained in a material)

$$\frac{\text{Mass Substance} \cdot 100}{\text{Mass Material}} = \text{Percent Weight}$$

PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS
Per- and polyfluoroalkyl substances (PFASs) are synthetic organofluorine chemical compounds that have multiple fluorine atoms attached to an alkyl chain

POLYMERIC:

Non-metallic materials, including plastics, elastomers, wood and cardboard. This includes:
- All injection molded, blow-molded and heat-pressed thermoplastic parts (PP, ABS, PA, PVC, etc.)
- All molded thermoset parts (UP, PUR)
- All foamed plastic parts (PUR, EPP, EPS, etc.)
- Natural and synthetic rubbers (NR, EPDM, etc.)
- Synthetic fibers (Polyester, Polyamide) such as in carpets, package trays, seat covers, seat belts

PRODUCT(S):

The entity that is supplied to Ford, which can be an assembly, part (component), sub-component, material, or substance. This could include the restricted substance itself (e.g., lead sulfide), a material containing the restricted substance (e.g., a friction material containing lead sulfide), or a component or assembly containing the restricted substance (e.g., a brake assembly with a lead-containing friction material).

REACH:

REACH (Registration, Evaluation, Authorization and Restriction of Chemicals; EU Regulation 1907/2006/EC)
https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:02006R1907-20150601&from=EN

UK REACH:

The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019 as amended, extended or re-enacted from time to time and including all subordinate legislation made from time to time under that Regulation in the United Kingdom.

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RECYCLED CONTENT:

The portion of a material's or product's weight that is composed of materials that have been recovered from or otherwise diverted from the scrap stream, either from the manufacturing process (PIR) or after consumer use (PCR). Recycled content consists of PIR and PCR, but not home scrap.

- Post-Industrial Recyclates (PIR): Scrap which is a by-product of the manufacturing process (excluding home scrap) and is re-used in the manufacture of the part.
- Home Scrap: Material commonly reused by the industry within the original manufacturing process. Examples include materials which are re-granulated and re-fed within a facility. Home scrap is not considered recycled content.
- Post-Consumer Recyclates (PCR): Scrap generated by consumers which has been re-used in the manufacturing of a new part. Examples are used pop bottles which are reused to make grill opening panels, or used bumpers which are re-made into new bumpers.

REPRODUCTIVE TOXICANTS:

Substances /mixtures or other agents which may affect male or female fertility, cause damage to the unborn or newborn child, or provoke miscarriage, including:

1) Any chemical known to the State of California to cause reproductive harm or birth defects, pursuant to The Safe Drinking Water and Toxic Enforcement Act of 1986 ("Proposition 65") http://www.oehha.ca.gov/prop65.html.

2) Substances/mixtures classified as Category 1, 2 or 3 due to adverse effects on fertility, or their developmental toxicity under the provisions of the EC CLP Regulation 1272/2008.

SELECT CAS:

In Attachments 2 and 3 and the Ford Restricted Substance List (RSL), many category entries will contain the words “Select CAS”. This designation implies that there are a select number of substances (listed by CAS number) affected in that category, based on regulation(s). For example, “Phthalates (Select CAS)” means only a select number of phthalate substances are restricted in that category, the restriction does not pertain to all phthalate substances in commerce. To see the list of restricted substances by CAS you must request a copy of the Ford RSL by emailing cshafer7@ford.com.

SENSITIZERS:

Substances which have been identified as confirmed or potential sensitizers by animal experimentation or human experience include but are not limited to chemicals which:

1) Cause a "substantial proportion of exposed people or animals to develop an allergic reaction in normal tissue after repeated exposure to the chemical" (refer to Occupational Safety and Health Administration Standard, 29 CFR 1910.1200).
2) Cause on "normal living tissue through an allergic or photodynamic process a hypersensitivity which becomes evident on reapplication of the same substance" (refer to Federal Hazardous Substances Act 16 CFR 1500.3(b) (9).
3) Are classified as inhalation or contact sensitizers under the provisions of the EC CLP Regulation 1272/2008 (http://ec.europa.eu/enterprise/sectors/chemicals/documents/classification/index_en.htm)
4) Are classified as such according to the World Health Organization “criteria for classification of skin and airway sensitizing substances in the work and general environments" (1996).

SERVICE KITS

Service Kits are post-production service parts/materials necessary for vehicle maintenance or repair that are packaged for customer convenience. If they contain packages of grease, lubricant, sealants, etc these products require compliance with section 3.1.3.1. Non-dimensional production material intended for service use – Ford Customer Service Division (FCSD) and FCSD needs to be contacted to ensure regional regulatory approval.

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SUBSTANCE:

The basic chemical or chemical compound listed in this Standard, e.g., lead or lead sulfide.

STATISTICAL AVERAGE:

The statistical average is determined by calculating the arithmetic mean:

$$\bar{x}_{\mathbf{arithm}} = \frac{1}{n}\sum_{i=1}^{n} x_i = \frac{x_1 + x_2 + \cdots + x_n}{n}$$

where, n represents the number of measurements (observations) and x represents the measured values.

TOXICOLOGY NUMBER (TOX NUMBER):

A unique worldwide six-digit number issued at the beginning of the material review process upon receipt of product chemistry and SDS for (production, non-production, and post-production) materials, and hazardous articles. It alone does not indicate if a product has received Comprehensive Material Clearance (Approval).

TYPE APPROVAL:

"Type-approval (Directive 2007/46/EC) means the procedure whereby a legal or regulatory agency in the name of a European Member State certifies that a type of vehicle satisfies the relevant technical requirements. If a phase-out is required for vehicles type approved after a certain date this refers to the initial whole vehicle type approval of a certain vehicle - this is typically around the <MP1> (Job 1) date. Type approval is the prerequisite for any registration of vehicles in the intended European markets. (http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:263:0001:0160:EN:PDF). Part of the whole vehicle type approval is also material and substance compliance."

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APPENDIX 2 - FORD INFORMATION CONTACTS

TOXICOLOGY/OCCUPATIONAL HYGIENE

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Landon, Essex, SS15 6EE
England
Telephone: 44-(0) 1268-403679
Email: eurotox@ford.com

Ford North American Toxicology Group
Ford Motor Company
World Headquarters, 1005
One American Road
Dearborn, MI 48126 U.S.A.
Telephone: 1-(313) 390-2707
Fax: 1-(313) 390-0354
Email: oehsmsds@ford.com

Ford Asia Pacific OHS
Ford Motor Company AP Headquarter
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Fax: +86-21 38581526
Email: apatox@ford.com

Ford Motor Company for South America
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04548-004
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Ford GCN Toxicology Group
No. 118 General Road, Jiangning
Nanjing, China
Telephone: 86-25-81063770
Email: XXIA15@ford.com

Ford IMG Toxicology Group
500/103 Moo 3, Tambol Tasit
Pluakdaeng, Rayong, Thailand
Telephone: 66-26-864766
Email: skrutnor @ford.com

ENVIRONMENTAL

Environmental Quality Office, Europe
Arterial Road
Landon, Essex, SS15 6EE
England
Telephone: 44 -1268-401558

Environmental Quality Office
Ford Motor Company
290 Town Center Dr. Suite 807E
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Ford Customer Service Post Production Regional Contacts

GCN:	Contact Name: Grace Xu	Email: lxu49@ford.com
IMG:	Contact Name: Chitra, S	Email: schitra7@ford.com
Europe:	Contact Name: Adem Kernal	Email: akernal1@ford.com
North America:	Contact Name: Dave Lozier	Email: dlozier@ford.com
South America:	Contact Name: Alexandre Capitanio	Email: acapita2@ford.com
	Contact Name: Angelo Aguiar	Email: aaguiar7@ford.com

FOR INTERNATIONAL MATERIAL DATA SYSTEM (IMDS) INFORMATION:

Materials Engineering &Testing, Body Engineering
Ford-Werke GmbH, Henry-Ford Strasse 1
D-50725 Köln (Niehl), Germany
Telephone: 49-(0)221-9013429
Email: sriewer1@ford.com; swernec1@ford.com

Other regions should contact these numbers:

Ford Motor Company - Global Materials Engineering
15000 Century Drive
Dearborn, MI 48120-1267
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Telephone: 1-(313) 845-4563
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APPENDIX 3 – REPORTING MATRIX

The purpose of the Reporting Matrix is to clarify the appropriate reporting mechanism for suppliers concerning material and substance content in products supplied to Ford Motor Company. Please refer to the "Definitions" (Appendix 1) for explanation of the material categories listed in the Reporting Matrix. The material examples listed are for ***illustrative purposes only*** and do not represent a complete listing. The acronym, "**IMDS**" indicates reporting via the International Material Data System, which was previously discussed in Section 4 of this Standard. The **Global Material Approval (GMA) Process** involves submission of complete supplier material information including Material Safety Data Sheet (MSDS) physical-chemical data, and material certifications through the Global Material Approval (GMA) system (where applicable). Products receiving Ford approval will be issued a Ford Toxicology/Ford Internal Reference (FIR) Number. For further details regarding the **Ford Approval Process** and affected materials, please contact the appropriate *regional* Ford Toxicology (TOX) or Environmental Quality Office (EQO) listed in Appendix 2. Non-dimensional materials (chemical products) contained on or in vehicle parts in a manner that is known or reasonably anticipated to pose a health or environmental hazard during normal handling, use, service or disposal are subject to separate detailed evaluation and clearance by Ford Toxicology and the Environmental Quality Office (see Section 3.0), in addition to IMDS reporting requirements.

	Production Material	**Non-Production Material**	**Post-Production Material**
Dimensional Material	**IMDS:** Report all parts remaining on the vehicle at point of sale. Cured paints and adhesives are dimensional materials and must be included in the assembly data.	**IMDS**: Not applicable **Use Attachment 1:** Facility equipment, assembly aides	**IMDS:** Report all Service (aftermarket) parts according to requirements listed in Section 4.
	Global Material Approval(GMA): Welding rods/ wires, dry friction materials must also be reported in IMDS	**Global Material Approval(GMA):** Welding rods/ wires, and solder used within Ford facilities for non-production applications	**Global Material Approval(GMA):** In addition to IMDS reporting requirements, dry friction materials (i.e. Brake pads, manual trans. clutch pads)
Non-dimensional Material	**IMDS:** Non-dimensional materials that are contained in parts must also be included in the IMDS data. For these materials please include the appropriate Ford Material Specification, Tox/FIR Numbers and GADSL-listed substances.	**IMDS:** Not Applicable	**IMDS:** Non-dimensional materials that are contained in parts must also be included in the IMDS data. For these materials please include the appropriate Ford Material Specification, Tox/FIR Numbers and GADSL-listed substances.
	Global Material Approval (GMA): In addition to any IMDS reporting requirements, all fluids, gases, pastes, powders, *uncured* paints/ sealants/ adhesives	**Global Material Approval (GMA):** All fluids, gases, pastes, powders, *uncured* paints/ sealants/ adhesives	**Global Material Approval (GMA):** In addition to any IMDS reporting requirements, all fluids, gases, pastes, powders, *uncured* paints/ sealants/ adhesives

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SUPPLIER RESTRICTED SUBSTANCE INFORMATION REPORTING FORM FOR (ATTACHMENT 1)
NON-PRODUCTION DIMENSIONAL MATERIALS/PACKAGING MATERIALS/OFFICE MATERIALS, WSS-M99P9999-A1

Supplier Name: _____
Global Supplier Data Base (GSDB) Code:_____
Supplier Contact: _____
Supplier Phone: _____Ext: _____ Supplier FAX Number:_____
Supplier Email: _____
Supplier Part Number: _____ Supplier Part Description: _____

Ford Motor Company Engineering Contact: _____ Phone Number: _____

INSTRUCTIONS: The above item (by part number) contains the following substance(s) listed in the current version of the Ford Engineering Material Standard. Ford Motor Company WSS-M99P9999-A1 policy requires that suppliers disclose listed substance information related to the product supplied. Products, for which full disclosure of ingredients has been supplied to Toxicology according to Section 3.0 of the Standard, do not require additional reporting.
Suppliers of facility equipment, machinery, and tooling (e g., conveyers, presses etc.), packaging materials, office materials and any sub-components contained therein, must utilize this form to submit information listed below including: 1) the name of the Production Line Equipment TOOLING AFFECTED that the sub-component part services, 2) if the part comes into direct contact with EMPLOYEE as a matter of routine use, 3) if the part contacts any material/part integral to the vehicle or other equipment that does so (i.e., affects MARKETS) and 4) if the part is a MAINTENANCE part that is periodically replaced and disposed. Suppliers of Facility equipment, or assembly aides whose main component contains no "sub-components", also utilize this form. **PLEASE COMPLETE AND RETURN THIS FORM VIA EMAIL TO NORTH AMERICAN GLOBAL MATERIALS & STANDARDS ENGINEERING:** RSMSHELP@ford.com. The electronic version of this form is accessible at https://us.library.covisint.com/PublicDocViewer?nodeID=2179

☐ **REQUEST FOR ACKNOWLEDGEMENT:** The above item (by part number) contains the following substance(s) listed in **WSS-M99P9999-A1**.
Ford Motor Company will acknowledge receipt of this report
☐ **I CERTIFY THAT THE ITEM(S) IDENTIFIED ON THIS FORM COMPLY WITH WSS-M99P9999-A1**

Form completed by: _____ Department: _____
Date: _____

Equipment / Tooling Supplier	Sub-Component Information									Check all affected		
Tooling Affected Production Line Equipment Name(s) / Model No.(s)	Detailed Supplier Part/Spec Numbers[1]	Supplier Part/ Product Name	Part Weight (kg)[2]	Material Name	Material Std No.	Material Weight (kg)[3]	Listed substance by CAS No. **AND** chemical name in Material/Part	Listed Substance Weight (kg)	Primary Purpose or Use of Listed Substance	EMPLOYEES	MARKETS	MAINTENENCE

Ford Motor Company Acknowledgment: _____ Date: _____

(1) Supplier Part/Specification number used by Ford for procurement.
(2) Report the weight (in kilograms) of the part supplied containing the listed substance.
(3) Report the weight (in kilograms) of the material containing the listed substance.

Submit additional signed copies of this form as necessary for additional Equipment/Tooling Suppliers

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RSMS Attachment 2: Substance Restrictions Affecting Dimensional Materials

Dimensional materials are those having their own shape and are essentially solid. Most are considered "articles" (See definition of "Article"). Examples of these materials would include assemblies, components, semi-components and hard parts. Note that some dimensional materials (e.g. dry friction materials, steel, steel alloys, etc.) are "hazardous articles" and can release hazardous non-dimensional substances during/after processing, and would be subject to reporting obligations of section 4.5.2 and may require a TOX number.

RSMS Row Number	Substance Category	Classification (Restriction Level)	Applications Affected (Comments)	Threshold (Percent)	Effective Date
0	All GADSL Listed Substances	P/D	ALL DIMENSIONAL AND NON-DIMENSIONAL MATERIALS ARE SUBJECT TO GADSL GUIDELINES LISTED AT http://www.gadsl.org BLANK APPLICATION COLUMN IN GADSL IMPLIES "ALL PRODUCTS"	SEE GADSL: ADDITIONAL OR MODIFIED REQUIREMENTS TO GADSL ARE LISTED BELOW	
0.1	ADDITIONAL OR MODIFIED REQUIREMENTS TO GADSL Rows listed in the RSMS are only those that differ from GADSL. Rows that are hidden/missing are identical to GADSL. Both the rows included in the RSMS and those listed in GADSL are subject to RSMS disclosures. For a FULL LISTING of all substances with CAS#s, see the GADSL and RSL (ww) (dddd).	P/D	Applications affected, additional substances, and/or differences in classifications beyond GADSL are listed in the RSMS and affect both DIMENSIONAL and NON-DIMENSIONAL MATERIALS as specified.		Immediate
0.2	ALL substances must be declared if present at or above 0.1 %, unless lower threshold is listed in the RSL (ww) (iiii). All substances that are listed as prohibited but don't meet the prohibition criteria (i.e. below the threshold or not used in an affected application) must be declared at any concentration. Please note this declaration includes any materials/substances that may be added during processing operations, if those substances are present in the finished supplied products.	D	All Products		Immediate
2	12-Aminododecanoic acid	P	In order to use these substances in the US, Ford personnel must confirm all requirements of the SNUR associated with the substance is met	0% (i)	Immediate
3	Ammonium salts (inorganic)	P			
3.1	Ammonium salts (inorganic)	P	Cellulose Insulation Mixtures and Cellulose Insulation Articles - Emission of Ammonia results in a concentration greater than 3ppm by volume (www)	(www)	Immediate
4	Aromatic amines or their salts	P			
4.1	Benzidine and its salts (Select CAS) (ww)	P	All Products	0% (c)	Immediate
4.4	2-Naphthylamine and its salts	P			
4.42	2-Naphthylamine and its salts (Select CAS) (ww)	P	Textiles under normal or reasonably foreseeable conditions of use, that come into contact with human skin to an extent similar to clothing	0.003%	Immediate
4.6	Other aromatic amines (Select CAS) (ww)	P			
4.61	Other aromatic amines (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc,i)	0% (i)	Immediate
4.62	Other aromatic amines (Select CAS) (ww)	P	In order to use these substances in the US, Ford personnel must confirm all requirements of the SNUR associated with the substance is met	0% (i)	Immediate
4.63	Other aromatic amines (Select CAS) (ww)	P	Textiles under normal or reasonably foreseeable conditions of use, that come into contact with human skin to an extent similar to clothing	0.003%	Immediate
4.64	Other aromatic amines (Select CAS) (ww)	P	Textiles under normal or reasonably foreseeable conditions of use, that come into contact with human skin to an extent similar to clothing	0.005%	Immediate
5	Arsenic and its compounds	P			
5.1	Arsenic and its compounds (Select CAS) (ww)	P	All Products (ll)	0% (i)	Immediate
5.3	Arsenic and its compounds	P	Textiles under normal or reasonably foreseeable conditions of use, that come into contact with human skin to an extent similar to clothing	0.0001% (z)	Immediate
6.1	Asbestos forms - Fibers	P	All Products (e.g. including Dry Friction Materials, etc.)	0% (xxx)	Immediate
6.2	Asbestos forms - Minerals - all members	P	All Products with potential to form Asbestos Fibers (e.g. including Dry Friction Materials, etc.)	0% (xxx)	Immediate
7	Azo dyes that form carcinogenic amines and carcinogenic amines formed from azo dyes	P			
7.1	Azo dyes that form carcinogenic amines and carcinogenic amines formed from azo dyes (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc,i)	0% (i)	Immediate
7.2	Azo dyes that form carcinogenic amines and carcinogenic amines formed from azo dyes	P	Textiles and leather	0.002% for China GB listed substances 0.003% for EU listed substances	Immediate
7.3	Azo Dyes that form Carcinogenic Amines	P	All Products	0.1%	Immediate

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RSMS Row Number	Substance Category	Classification (Restriction Level)	Applications Affected (Comments)	Threshold (Percent)	Effective Date
8	Benzene series substances (Select CAS) (ww)	P			
8.1	Benzene - non-fuel products	P			
9	Biocidal products (kkk)	P			
9.1	Dodecachloropentacyclo1,3,4-Metheno-1H cyclobuta(cd) pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro- decane (Mirex) and related compounds - Select CAS (ww)	P	All Products	0% (i)	Immediate
9.2	Biocidal products (kkk)	P	Products for use in the EU containing biocidal substances whose approvals have expired or that are not approved for one or more of the following product types listed in Annex V of the BPR (PT 2, 5, 6, 7, 8, 9, 10, 11, 12, or 13) (kkk)	0% (i)	Immediate
9.3	Biocidal Products (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
11	2,2-Bis(bromomethyl)-1,3-propanediol	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
12	Boron Compounds (Select CAS) (ww)	P			Immediate
12.1	Boric acid (H3BO3), Sodium salt	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
12.2	Boron Compounds (Select CAS) (ww)	P	All Products (subject to future EU REACH Authorisation, see effective date)	0.1%	27-May-2023
13	1,2,3,4-Butanetetracarboxylic acid, tetrakis(1,2,2,6,6-pentamethyl-4-piperidinyl) ester	P	In order to use these substances in Canada and/or US, Ford personnel must confirm all requirements of the SNAc [See NSNR (ccc)] or SNUR associated with the substance is met	0% (i)	Immediate
14	Cadmium and its compounds	P	(qqq)		
14.1	Cadmium and its compounds	P	All products (except those covered by a lower threshold in subsections below)	0.01%	Immediate
14.2	Cadmium and its compounds	P	Cadmium Plating in vehicle and non-vehicle applications	0% (i)	Immediate
14.3	Cadmium and its compounds	P	Textiles under normal or reasonably foreseeable conditions of use, that come into contact with human skin to an extent similar to clothing	0.0001% (z)	Immediate
14.4	Cadmium and its compounds	P	PVC Artificial leather	0.0075%	Immediate
15	Chlorate and Perchlorate Salts (Select CAS) (ww)	P			
15.1	Chlorate and Perchlorate Salts (Select CAS) (ww)	P	All Products in Thailand	0% (i)	Immediate
16	Chlorinated Alkanes/Alkenes	P			
16.1	Short-Chain Chlorinated Alkanes/Alkenes (SCCA)	P			
16.11	Short-Chain Chlorinated Alkanes/Alkenes (SCCA) as defined by applicable regulation	P	All Products	0% (i)	Immediate
16.12	Additional chlorinated alkanes/alkenes defined as SCCA by Regulator (Select CAS) (ww)	P	All Products - unless SCCA content is affirmed to be 0% (k)	0% (i)	Immediate
16.2	Mid-Chain Chlorinated Alkanes (MCCA: C14-C17) and Long-Chain Chlorinated Alkanes (LCCA: C18-C20)	P			
16.21	Mid-Chain Chlorinated Alkanes (MCCA: C14-C17) and Long-Chain Chlorinated Alkanes (LCCA: C18-C20) (Select CAS) (ww)	P	All Products	0% (i)	Immediate
16.22	Mid-Chain Chlorinated Alkanes (MCCA: C14-C17) and Long-Chain Chlorinated Alkanes (LCCA: C18-C20) (Select CAS) (ww)	P	All Products in the US except for use as flame retardants and plasticizers in polyvinyl chloride, polymers, and rubber; flame retardant, plasticizer, and lubricant in adhesives, caulk, sealants, and coatings; additive in lubricants including metalworking fluids; and flame retardant and waterproofer in textiles; and a confidential adhesives additive use.	0% (i)	Immediate
16.23	Mid-Chain Chlorinated Alkanes (MCCA: C14-C17) and Long-Chain Chlorinated Alkanes (LCCA: C18-C20)	P	All Products - unless SCCA content is affirmed to be 0% (k)	0% (i)	Immediate
16.3	Very Long-Chain Chlorinated Alkanes(vLCCA: C>20) or Chlorinated Alkanes of an Unspecified Chain Length	P			
16.31	Very Long-Chain Chlorinated Alkanes (vLCCA: C>20) (Select CAS) (ww)	P	All Products	0% (i)	Immediate
16.32	Chlorinated Alkanes of an Unspecified Chain Length (Select CAS) (ww)	P	All Products	0% (i)	Immediate
16.33	Very Long-Chain Chlorinated Alkanes(vLCCA: C>20) or Chlorinated Alkanes of an Unspecified Chain Length	P	All Products - unless SCCA content is affirmed to be 0% (k)	0% (i)	Immediate

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RSMS Row Number	Substance Category	Classification (Restriction Level)	Applications Affected (Comments)	Threshold (Percent)	Effective Date
16.4	Substances related to chlorinated alkanes that might contain Short Chain Chlorinated Alkanes/Alkenes (SCCAs)	P	All Products - unless SCCA content is affirmed to be 0% (k)	0% (i)	Immediate
18	Chlorinated Hydrocarbons (Select CAS) (ww)	P			
18.1	Chlorinated Hydrocarbons (Select CAS) (ww)	P	All Products	0% (i)	Immediate
18.2	Chlorinated Hydrocarbons (Select CAS) (ww)	P	All Products	0.1%	Immediate
18.3	Chlorinated Hydrocarbons (Select CAS) (ww)	P	All Products	0.1%	Immediate
18.7	Chlorinated Hydrocarbons (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
19	Chlorinated Naphthalenes	P	All Products	0% (i)	Immediate
20	a-chlorotoluene (benzyl chloride) and its hydrolysates (Select CAS) (ww)	P			
20.1	a-chlorotoluene (benzyl chloride) and its hydrolysates (Select CAS) (ww)	P	Textiles under normal or reasonably foreseeable conditions of use, that come into contact with human skin to an extent similar to clothing	0.0001%	Immediate
20.2	a-chlorotoluene (benzyl chloride) and its hydrolysates (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
21	Chromium(VI) (Cr+6; Hexavalent) and its compounds	P			
21.1	Chromium(VI) (Cr+6; Hexavalent) and its compounds	P	All Products (Cement additives, leather articles, and some textiles are prohibited at lower thresholds in the below subsections)	0.1%	Immediate
21.2	Chromium(VI) (Cr+6; Hexavalent) and its compounds	P	All Products (xx) (Cement additives, leather articles, and some textiles are prohibited at lower thresholds in the below subsections)	0.1% (m)	Immediate
21.4	Chromium(VI) (Cr+6; Hexavalent) and its Compounds	P	Leather articles	0.0003%	Immediate
21.5	Chromium(VI) (Cr+6; Hexavalent) and its compounds	P	Textiles under normal or reasonably foreseeable conditions of use, that come into contact with human skin to an extent similar to clothing	0.0001% (z)	Immediate
21.6	Chromium (VI) (Cr+6: Hexavalent) and its compounds subject to the Canadian Chemical Challenge Program - Phase I (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
22	Copper, metallic	P			
22.1	Copper, metallic	P	Brake Friction Materials	5%	Immediate
22.2	Copper, metallic	P	Brake Friction Materials	0.5%	1-Jan-2025
24	Dichloro-diphenyl-trichloro-ethane (DDT)	P	All Products	0% (i)	Immediate
26	N,N-dimethyl formamide	P		0.3%	Immediate
26.1	N,N-dimethyl formamide	P	Textiles under normal or reasonably foreseeable conditions of use, that come into contact with human skin to an extent similar to clothing	0.3%	Immediate
29	Fluorinated Gases (ww)	P			
29.1	Fluorinated Gases (Select CAS) (ww)	P			
29.11	Fluorinated Gases (Select CAS) (ww)	P	All applications in the United States other than the following uses: 1. As a refrigerant in new vehicle air conditioning systems in new vehicles 2. Recharging of vehicle air conditioning systems by the OEM (where the substance was originally incorporated into the vehicle system) 3. Consumer products used to recharge the vehicle air conditioning systems where the substance was originally used to charge the system by the OEM	0% (i)	Immediate
29.2	Fluorinated Greenhouse Gases with a Global Warming Potential (GWP)	P			
29.21	Fluorinated Greenhouse Gases with a GWP ≤150 or an unpublished GWP (Select CAS)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
29.22	Fluorinated Greenhouse Gases with a GWP ≤150 or an unpublished GWP	P	Tires in EU	0% (i)	Immediate
29.23	Fluorinated Greenhouse Gases with Global Warming Potential (GWP) >150	P	Vehicle refrigerants or refrigerant blends in all M1 or N1 Class I vehicles produced for Europe; Tires in EU (y)	0% (i)	Immediate
29.24	Fluorinated Gases with a Global Warming Potential of ≥2500	P	Stationary refrigeration equipment (r) - except servicing existing equipment where legally permitted	0% (i)	Immediate
29.25	Fluorinated Gases with a Global Warming Potential of ≥1000	P	Motor vehicle air conditioning (new equipment in passenger cars and light-duty trucks only) in the United States	0% (i)	Immediate
29.3	Hydrofluorocarbons	P			

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RSMS Row Number	Substance Category	Classification (Restriction Level)	Applications Affected (Comments)	Threshold (Percent)	Effective Date
29.31	Hydrofluorocarbons with Global Warming Potential (GWP) >150	P	Technical aerosols and foams in EU (y)	0% (i)	1. Immediate for technical aerosols & extruded polystyrene foams 2. 1-Jan-2023 for other foams
29.32	Hydrofluorocarbons (Select CAS) (ww)	P	Foams including flexible polyurethane, phenolic insulation board and bunstock, rigid polyurethane and polyisocyanate laminated boardstock Foams including Integral skin polyurethane, extruded polystrene sheets, rigid polystyrene: slabstock and other	0% (i)	Immediate
29.33	Hydrofluorocarbons (Select CAS) (ww)	P	Phenolic insulation board and bunstock	0% (i)	Immediate
29.34	Hydrofluorocarbons (Select CAS) (ww)	P	Foams including Integral skin polyurethane, extruded polystrene sheets, rigid polystyrene: slabstock and other	0% (i)	Immediate
29.35	Hydrofluorocarbons (Select CAS) (ww)	P	Plastic foam or rigid foam product	0% (i)	Immediate
29.36	Hydrofluorocarbons (Select CAS) (ww)	P	Vehicle refrigerants or refrigerant blends in vehicles manufactured in Canada	0% (i)	Immediate
29.37	Hydrofluorocarbons (Select CAS) (ww)	P	Polyolefins and extruded polystrene boardstock and billets	0% (i)	Immediate
29.4	Perfluorocarbons and HFC-23	P	Fire protection systems and fire extinguishers in Europe	0% (i)	Immediate
30	Formaldehyde and formaldehyde compounds (Select CAS) (ww)	P			
30.1	Formaldehyde (Free)	P			Immediate
30.12	Formaldehyde (Free)	P	Textiles under normal or reasonably foreseeable conditions of use, that come into contact with human skin to an extent similar to clothing	0.003%	Immediate
30.13	Formaldehyde (Free)	P	Textiles that do not come into contact with skin	0.03%	Immediate
30.2	Formaldehyde reaction products (Select CAS) (ww)	P	All Products	0.1%	Immediate
30.3	Formaldehyde compounds (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
31	Glycol ethers and glycol ether acetates (Select CAS) (ww)	P			
31.1	2-Methoxyethanol (2ME)	P			Immediate
31.11	2-Methoxyethanol (2ME)	P	All Products except semiconductors	0% (i)	Immediate
31.12	2-Methoxyethanol (2ME)	P	Semiconductors	0.5%	Immediate
31.32	Bis(2-methoxyethyl) ether	P	All Products	0.1%	Immediate
31.33	2-ethoxyethanol (2-EE)	P	In order to use these substances in the US, Ford personnel must confirm all requirements of the SNUR associated with the substance is met	0% (i)	Immediate
31.4	Glycol ether acetates (Select CAS) (ww)	P	In order to use these substances in Canada and/or US, Ford personnel must confirm all requirements of the SNAc [See NSNR (ccc)] or SNUR associated with the substance is met	0% (i)	Immediate
32	Halogenated polyphenyls, diphenyl ethers and phosphates	P			
32.1	Hexabromo-cyclododecane (HBCD)	P	All Products	0% (i)	Immediate
32.2	Polybrominated biphenyls (PBB)	P			Immediate
32.21	Polybrominated biphenyls (PBB)	P	All Products	0% (i)	Immediate
32.22	Polybrominated biphenyls (PBB)	P	Textiles likely to be in contact with the skin	0% (i)	Immediate
32.23	Polybrominated biphenyls (PBB)	P	All products except textiles likely to be in contact with the skin	0.1%	Immediate
32.3	Polybrominated diphenyl ethers (PBDE)	P	All Products	0% (i)	Immediate
32.4	Polychlorinated biphenyls (PCB)	P	All Products	0% (i)	Immediate
32.5	Polychlorinated terphenyls (PCT)	P	All Products	0% (i)	Immediate
32.6	Halogenated Phosphates	P			Immediate
32.61	Tris(2,3-dibromopropyl)phosphate [TRIS]	P	All Products	0% (i)	Immediate
32.62	Tris(2-chloroethyl) phosphate	P	All Products	0% (i)	
34	Hydrazine Compounds (Select CAS) (ww)	P			
34.1	Hydrazine Compounds (Select CAS) (ww)	P	All Products in Thailand	0% (i)	Immediate
34.2	Hydrazine Compounds (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
35	Hydrogen peroxide	P	Shall not be made available to or introduced, as a substance or a mixture, to the general public (after market) in the EU only	12%	Immediate
36	2,4-Imidazolidinedione, bromochloro-5,5-dimethyl	P	In order to use these substances in the US, Ford personnel must confirm all requirements of the SNUR associated with the substance is met	0% (i)	Immediate
37	Ketones (Select CAS) (ww)	P			

RSMS Attachment 2: Substance Restrictions Affecting Dimensional Materials

Dimensional materials are those having their own shape and are essentially solid. Most are considered "articles" (See definition of "Article"). Examples of these materials would include assemblies, components, semi-components and hard parts. Note that some dimensional materials (e.g. dry friction materials, steel, steel alloys, etc.) are "hazardous articles" and can release hazardous non-dimensional substances during/after processing, and would be subject to reporting obligations of section 4.5.2 and may require a TOX number.

RSMS Row Number	Substance Category	Classification (Restriction Level)	Applications Affected (Comments)	Threshold (Percent)	Effective Date
37.1	Ketones (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
37.2	Methyl-n-butyl ketone	P	In order to use these substances in Canada and/or US, Ford personnel must confirm all requirements of the SNAc [See NSNR (ccc)] or SNUR associated with the substance is met	0% (i)	Immediate
38	Lead and its compounds	P			
38.1	Lead and its compounds	P	All products (ppp,d) Some exemptions may apply (hh) Paints, PVC artificial leather, and some textiles are prohibited at lower thresholds in the subsections below.	0.1%	Immediate
38.2	Lead and its compounds (Select CAS) (ww)	P	Paints and products intended for use in paint	0% (i)	Immediate
38.3	Lead and its compounds	P	PVC Artificial Leather	0.009%	Immediate
38.4	Lead and its compounds	P	Textiles under normal or reasonably foreseeable conditions of use, that come into contact with human skin to an extent similar to clothing	0.0001% (z)	Immediate
39	Mercury and its compounds	P	All Products: Some exemptions may exist for facility research applications.	0% (i)	Immediate
40.5	Methanol	P	Products for use in Thailand intended for spraying and those that contact skin	0% (i)	Immediate
41	Methyl carbamate (Carbamic acid, methyl ester)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
42	Methylcyclopentadienyl manganese tricarbonyl (MMT)	P	Fuel in EU	0.0002% Mn/L	Immediate
44	N,N-dimethylacetamide (DMAC)	P	Textiles under normal or reasonably foreseeable conditions of use, that come into contact with human skin to an extent similar to clothing	0.3%	Immediate
45	Nickel and its compounds	P			
45.1	Nickel and its compounds	P	Dry Friction Materials (e.g. brake and clutch pads)	0.1%	Immediate
45.2	Nickel and its compounds	P	Component surfaces likely to be routinely touched, e.g., handles and buckles (t)	0.5 ug/cm2/week (Ni release rate threshold) (aa)	Immediate
45.3	Nickel compounds subject to a Canadian SNAc (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
46	Nitrogen compounds (Select CAS) (ww)	P			
46.1	N-Nitrosamines/N-Nitrosamides (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
46.3	N-Nitrosodimethylamine, which has the molecular formula C2H6N2O	P	All Products	0% (i)	Immediate
47	Nonylphenols and their ethoxylates	P			
47.2	Nonylphenol Ethoxylates	P			
47.21	Nonylphenol Ethoxylates (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
47.22	4-Nonylphenol, branched and linear, Ethoxylated	P	All Products	0.1% (mm)	Immediate
48	Octylphenols and their ethoxylates	P			
48.2	Octylphenols and their ethoxylates (Select CAS) (ww)	P	All Products	0.1% (mm)	Immediate
49	Organo-Tin compounds	P			
49.1	Diorgano-Tin compounds (e.g. dialkyl-tin compounds)	P			
49.11	Dibutyltin (DBT)	P	All aftermarket products for supply to general public	0.1% (hhh)	Immediate
49.13	Dioctyltin (DOT)	P	The following articles intended for use by the general public: 1) textiles, gloves, footwear or part of footwear intended to come into contact with the skin; and 2) wall and floor coverings 3) Two component room temperature vulcanization molding kits (RTV-2 molding kits)	0.1% (hhh)	Immediate
49.2	Triorgano-Tin compounds	P			
49.21	Tributyltin compounds	P	All products	0% (i)	Immediate
49.22	Other triorganotin compounds (not tributyl tins) (Select CAS) (ww)	P	All Products in Thailand	0% (i)	Immediate
49.24	Other triorganotin compounds (not tributyl tins)	P	All articles (including vehicle related parts)	0.1% (hhh)	Immediate

RSMS Attachment 2: Substance Restrictions Affecting Dimensional Materials

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RSMS Row Number	Substance Category	Classification (Restriction Level)	Applications Affected (Comments)	Threshold (Percent)	Effective Date
50	Oxiranes (Epoxides) (Select CAS) (ww)	P			Immediate
50.1	2-(Phenoxymethyl)oxirane (Phenyl glycidyl ether)	P	All Products in Thailand	0% (i)	Immediate
50.2	Oxiranes (Epoxides) (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
51	Ozone Depleting Substance (see definition in Appendix 1 of RSMS)	P			
51.1	Ozone Depleting Substances (Class I), Montreal Protocol: Annex A: All, Annex B: All, Annex C: Groups II and III & Annex E)	P			
51.11	Ozone Depleting Substances (Class I), Montreal Protocol: Annex A: All, Annex B: All, Annex C: Groups II and III & Annex E)	P	All Products	0% (i)	Immediate
51.2	Ozone Depleting Substances (Class II): Montreal Protocol Annex C Group I (HCFCs)	P	All Products - except those used to service existing equipment where legally permitted	0% (i)	Immediate
52	Pentachlorophenol (PCP) and associated substances	P			
53	Perfluoroalkyl compounds (Includes: Perfluoroalkyl sulfonates e.g., PFAS, fluorotelomers, and telomere-based polymeric substances)(zz)	P			
53.1	Perfluoro-octanoic acids (PFOA), its salts, and related compounds (uuu)	P			
53.11	Perfluoro-octanoic acids (PFOA), and its salts, (uuu)	P	All Products (iii)	0% (uu)	Immediate
53.12	Perfluoro-octanoic acids (PFOA) related substances	P	All Products (iii)	0% (uu)	Immediate
53.2	Perfluorooctane sulfonic acid (PFOS) and its derivatives C8F17SO2X (X = OH, Metal salt (O-M+), halide, amide, and other derivatives including polymers)	P	All Products	0% (uu)	Immediate
53.4	PFAS defined as any member of the class of fluorinated organic chemicals containing at least one fully fluorinated carbon atom	P	All products in the United States only (with various future implementation dates) (zz)	0% (i)	1. Carpet and fabric treatment: 1-Jan-2023 2. All products: 1-January 2030
54	Phenol Substances and Phenol Derivatives (Select CAS) (ww)	P			
54.2	Phenol-Based UV Absorbers (Select CAS) (ww)	P	All Products (mm)	0.1%	27-Nov-2023 (all applicable jurisdictions except Switerland) 2-Aug-2024 (Switzerland)
54.3	Phenol Substances and Phenol Derivatives (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
54.5	Phenol, isopropylated phosphate (3:1)	P	All non-dimensionals (except for lubricants and greases, , and all non-vehicle dimensional applications in the US only Adhesives and sealants are listed in the subsection below with a future prohibition date	0% (i)	31-Oct-24
54.6	Phenol, isopropylated phosphate (3:1)	P	Adhesives and sealants in the US only	0% (i)	6-Jan-25
55	Phosphoric acid, iron(2+) lithium salt (1:1:1)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
56	Phthalates	P			
56.1	Phthalates (Select CAS) (ww)	P	All products	0.1%	Immediate
56.2	Phthalates (Select CAS) (ww)	P	Articles in non-vehicle applications (dd)	0.1% (ee)	Immediate
56.3	Phthalates (Select CAS) (ww)	P	All articles in vehicle applications	0.1% (ee)	7-Jan-2024
56.4	Phthalates (Select CAS) (ww)	P	All Products (subject to future EU REACH Authorisation, see effective date)	0.1%	27-Feb-2023
56.5	Phthalates (Select CAS) (ww)	P	Textiles under normal or reasonably foreseeable conditions of use, that come into contact with human skin to an extent similar to clothing	0.1% individual and total listed phthalates as specified in footnote (cc)	Immediate
56.6	Phthalates (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met (ccc)	0% (i)	Immediate

RSMS Attachment 2: Substance Restrictions Affecting Dimensional Materials

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RSMS Row Number	Substance Category	Classification (Restriction Level)	Applications Affected (Comments)	Threshold (Percent)	Effective Date
57	Poly(oxy-1,2-ethanediyl), α-[2(or 4)-tetrapropenylphenyl]-ω-hydroxy-	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
59	Polycyclic aromatic hydrocarbons (PAH; PCAH) (Select CAS) (ww)	P			
59.2	Polycyclic aromatic hydrocarbons (PAH; PCAH) (Select CAS)	P	Accessible Plastic or rubber parts (gg, eee, fff)	0.0001%	Immediate
59.3	Polycyclic aromatic hydrocarbons (PAH; PCAH) (Select CAS) (ww)	P	Accessible plastic or rubber parts for industrial uses and for supply to the general public/aftermarket (eee,fff)	0.005% total of listed PAHS 0.005% total of Phenanthrene, Anthracene, Fluoranthene, Pyrene	Immediate
59.4	Polycyclic aromatic hydrocarbons (PAH; PCAH) (Select CAS) (ww)	P	Textiles under normal or reasonably foreseeable conditions of use, that come into contact with human skin to an extent similar to clothing	0.0001%	Immediate
59.6	Polycyclic aromatic hydrocarbons (PAH; PCAH) (Select CAS) (ww)	P	Deadener pads supplied to APAC region (fff)	0.002% BaP and 0.02% the sum of other listed PAHs (ggg)	Immediate
59.7	Polycyclic aromatic hydrocarbons (PAH; PCAH) (Select CAS) (ww)	P	All Products	0.1%	Immediate
60	Products of Endangered Species	P	All Products	0% (i)	Immediate
61	n-propyl bromide	P	All Products	0.1%	Immediate
62	Pyrrolidones - Select CAS (ww)	P			
62.3	Pyrrolidones - Select CAS (ww)	P	Textiles under normal or reasonably foreseeable conditions of use, that come into contact with human skin to an extent similar to clothing in jursidictions following EU REACH	0.3%	Immediate
63	Quinoline	P			
63.1	Quinoline	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
63.2	Quinoline	P	Textiles under normal or reasonably foreseeable conditions of use, that come into contact with human skin to an extent similar to clothing	0.005%	Immediate
64	Radioactive isotopes and substances, all members	P	All Products, including scrap metal contaminants. Excludes substances and devices used in the manufacturing process	(jj)	Immediate
65	5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [1], 5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2] [covering any of the individual stereoisomers of [1] and [2] or any combination thereof] (Select CAS) (ww)	P	All Products	0.1%	27-Nov-2023
67	Silica, Crystalline - Quartz	P	Materials used in abrasive blasting	1%	Immediate
68	Siloxanes and Silanes (Select CAS) (ww)	P			
68.1	Siloxanes (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
68.3	Silanes	P			
68.32	Silanes (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
69	Sulfur compounds (Select CAS) (ww)	P			
69.1	Sulfur, sulfate and sulfide compounds (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
70	Sultones (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
71	5-tert-butyl-2,4,6-trinitro-m-xylene (Musk xylene)	P	All Products	0.1%	Immediate
72	2,4,5-trimethylaniline hydrochloride	P	Textiles under normal or reasonably foreseeable conditions of use, that come into contact with human skin to an extent similar to clothing	0.003%	Immediate
73	Tris-(1-aziridinyl) phosphine oxide	P	All textile articles intended to come into contact with the skin	0% (i)	Immediate
74	Trixylyl phosphate	P	All Products in countries with REACH-like regulations	0.1%	27-May-2023 (all applicable jurisdictions except Switzerland) 02-Feb-2024 (Switzerland)

RSMS Attachment 2: Substance Restrictions Affecting Dimensional Materials

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RSMS Row Number	Substance Category	Classification (Restriction Level)	Applications Affected (Comments)	Threshold (Percent)	Effective Date
75	Ugilec 141 (Monomethyl tetrachlorodiphenyl methane)	P	All Products	0% (i)	Immediate
76	Urea Compounds (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
77	Vanadium Compounds (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
78	Vinyl Compounds (Select CAS) (ww)	P			
78.1	Vinyl Chloride	P			Immediate
78.11	Vinyl Chloride	P	Vinyl chloride monomer content in the polyvinyl chloride layer of artificial leather	0.0005% (5 ppm as monomer)	Immediate
78.13	Vinyl Chloride	P	All Products-Thailand and Australia only	0% (i)	Immediate
78.2	Vinyl Compounds (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
79	Zinc Salts (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
80	Declarable Substances (ww)	D	All Products	(v)	Immediate

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RSMS Attachment 3: Substance Restrictions Affecting Non-Dimensional Materials

Non-dimensional materials are those that have no intrinsic shape without containing structure. Examples of these materials are fluids, gases, powders and semi-solids (pastes) like adhesives, greases, paints, bulk chemicals, and separately packaged chemicals in post-production service kits.

RSMS Row Number	Substance Category	Classification (Restriction Level)	Applications Affected (Comments)	Threshold (Percent)	Effective Date
0	All GADSL Listed Substances	P/D	ALL DIMENSIONAL AND NON-DIMENSIONAL MATERIALS ARE SUBJECT TO GADSL GUIDELINES LISTED AT http://www.gadsl.org BLANK APPLICATION COLUMN IN GADSL IMPLIES "ALL PRODUCTS"	SEE GADSL: ADDITIONAL OR MODIFIED REQUIREMENTS TO GADSL ARE LISTED BELOW	
0.1	ADDITIONAL OR MODIFIED REQUIREMENTS TO GADSL Rows listed in the RSMS are only those that differ from GADSL. Rows that are hidden/missing are identical to GADSL. Both the rows included in the RSMS and those listed in GADSL are subject to RSMS disclosures. For a FULL LISTING of all substances with CAS#s, see the GADSL and RSL (ww) (dddd).	P/D	Applications affected, additional substances, and/or differences in classifications beyond GADSL are listed in the RSMS and affect both DIMENSIONAL and NON-DIMENSIONAL MATERIALS as specified.		Immediate
0.2	ALL substances must be declared if present at or above 0.1 %, unless lower threshold is listed in the RSL (ww) (iiii). All substances that are listed as prohibited but don't meet the prohibition criteria (i.e. below the threshold or not used in an affected application) must be declared at any concentration. Please note this declaration includes any materials/substances that may be added during processing operations, if those substances are present in the finished supplied products.	D	All Products		Immediate
1	Acrylamide	P	Grouting applications	0.1%	Immediate
2	12-Aminododecanoic acid	P	In order to use these substances in the US, Ford personnel must confirm all requirements of the SNUR associated with the substance is met	0% (i)	Immediate
3	Ammonium salts (inorganic)	P			
3.1	Ammonium salts (inorganic)	P	Cellulose Insulation Mixtures and Cellulose Insulation Articles - Emission of Ammonia results in a concentration greater than 3ppm by volume (www)	(www)	Immediate
3.2	Ammonium nitrate	P	Shall not be made available to or introduced, as a substance or a mixture, to the general public (after market) in the EU only	16% (bbb)	Immediate
4	Aromatic amines or their salts	P			
4.1	Benzidine and its salts (Select CAS) (ww)	P	All Products	0% (c)	Immediate
4.4	2-Naphthylamine and its salts	P			
4.6	Other aromatic amines (Select CAS) (ww)	P			
4.61	Other aromatic amines (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc,i)	0% (i)	Immediate
4.62	Other aromatic amines (Select CAS) (ww)	P	In order to use these substances in the US, Ford personnel must confirm all requirements of the SNUR associated with the substance is met	0% (i)	Immediate
4.63	Other aromatic amines (Select CAS) (ww)	P	Textiles under normal or reasonably foreseeable conditions of use, that come into contact with human skin to an extent similar to clothing	0.003%	Immediate
5	Arsenic and its compounds	P			
5.1	Arsenic and its compounds (Select CAS) (ww)	P	All Products (ll)	0% (i)	Immediate
5.2	Arsenic and its compounds	P	All Non-dimensional products	0% (i)	Immediate
6.1	Asbestos forms - Fibers	P	All Products (e.g. including Dry Friction Materials, etc.)	0% (xxx)	Immediate
6.2	Asbestos forms - Minerals - all members	P	All Products with potential to form Asbestos Fibers (e.g. including Dry Friction Materials, etc.)	0% (xxx)	Immediate
7	Azo dyes that form carcinogenic amines and carcinogenic amines formed from azo dyes	P			
7.1	Azo dyes that form carcinogenic amines and carcinogenic amines formed from azo dyes (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc,i)	0% (i)	Immediate
7.3	Azo Dyes that form Carcinogenic Amines	P	All Products	0.1%	Immediate
8	Benzene series substances (Select CAS) (ww)	P			
8.1	Benzene - non-fuel products	P			
8.12	Benzene - aftermarket cleaning products	P	Aftermarket consumer cleaning products for automotive cleaning applications	0.003% (u)	Immediate
8.2	Benzene - fuel products	P	All fuels	Various (x)	Immediate
9	Biocidal products (kkk)	P			

RSMS Attachment 3: Substance Restrictions Affecting Non-Dimensional Materials

Non-dimensional materials are those that have no intrinsic shape without containing structure. Examples of these materials are fluids, gases, powders and semi-solids (pastes) like adhesives, greases, paints, bulk chemicals, and separately packaged chemicals in post-production service kits.

RSMS Row Number	Substance Category	Classification (Restriction Level)	Applications Affected (Comments)	Threshold (Percent)	Effective Date
9.1	Dodecachloropentacyclo1,3,4-Metheno-1H cyclobuta(cd) pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro- decane (Mirex) and related compounds - Select CAS (ww)	P	All Products	0% (i)	Immediate
9.2	Biocidal products (kkk)	P	Products for use in the EU containing biocidal substances whose approvals have expired or that are not approved for one or more of the following product types listed in Annex V of the BPR (PT 2, 5, 6, 7, 8, 9, 10, 11, 12, or 13) (kkk)	0% (i)	Immediate
9.3	Biocidal Products (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
10	Biologically-Active Materials	P		0.1%	Immediate
11	2,2-Bis(bromomethyl)-1,3-propanediol	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
12	Boron Compounds (Select CAS) (ww)	P			Immediate
12.1	Boric acid (H3BO3), Sodium salt	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
12.2	Boron Compounds (Select CAS) (ww)	P	All Products (subject to future EU REACH Authorisation, see effective date)	0.1%	27-May-2023
13	1,2,3,4-Butanetetracarboxylic acid, tetrakis(1,2,2,6,6-pentamethyl-4-piperidinyl) ester	P	In order to use these substances in Canada and/or US, Ford personnel must confirm all requirements of the SNAc [See NSNR (ccc)] or SNUR associated with the substance is met	0% (i)	Immediate
14	Cadmium and its compounds	P	(qqq)		
14.1	Cadmium and its compounds	P	All products (except those covered by a lower threshold in subsections below)	0.01%	Immediate
15	Chlorate and Perchlorate Salts (Select CAS) (ww)	P			
15.1	Chlorate and Perchlorate Salts (Select CAS) (ww)	P	All Products in Thailand	0% (i)	Immediate
15.2	Chlorate and Perchlorate Salts (Select CAS) (ww)	P	Shall not be made available to or introduced, as a substance or a mixture, to the general public (after market) in the EU only	40%	Immediate
16	Chlorinated Alkanes/Alkenes	P			
16.1	Short-Chain Chlorinated Alkanes/Alkenes (SCCA)	P			
16.11	Short-Chain Chlorinated Alkanes/Alkenes (SCCA) as defined by applicable regulation	P	All Products	0% (i)	Immediate
16.12	Additional chlorinated alkanes/alkenes defined as SCCA by Regulator (Select CAS) (ww)	P	All Products - unless SCCA content is affirmed to be 0% (k)	0% (i)	Immediate
16.2	Mid-Chain Chlorinated Alkanes (MCCA: C14-C17) and Long-Chain Chlorinated Alkanes (LCCA: C18-C20)	P			
16.21	Mid-Chain Chlorinated Alkanes (MCCA: C14-C17) and Long-Chain Chlorinated Alkanes (LCCA: C18-C20) (Select CAS) (ww)	P	All Products	0% (i)	Immediate
16.22	Mid-Chain Chlorinated Alkanes (MCCA: C14-C17) and Long-Chain Chlorinated Alkanes (LCCA: C18-C20) (Select CAS) (ww)	P	All Products in the US except for use as flame retardants and plasticizers in polyvinyl chloride, polymers, and rubber; flame retardant, plasticizer, and lubricant in adhesives, caulk, sealants, and coatings; additive in lubricants including metalworking fluids; and flame retardant and waterproofer in textiles; and a confidential adhesives additive use.	0% (i)	Immediate
16.23	Mid-Chain Chlorinated Alkanes (MCCA: C14-C17) and Long-Chain Chlorinated Alkanes (LCCA: C18-C20)	P	All Products - unless SCCA content is affirmed to be 0% (k)	0% (i)	Immediate
16.3	Very Long-Chain Chlorinated Alkanes(vLCCA: C>20) or Chlorinated Alkanes of an Unspecified Chain Length	P			
16.31	Very Long-Chain Chlorinated Alkanes (vLCCA: C>20) (Select CAS) (ww)	P	All Products	0% (i)	Immediate
16.32	Chlorinated Alkanes of an Unspecified Chain Length (Select CAS) (ww)	P	All Products	0% (i)	Immediate
16.33	Very Long-Chain Chlorinated Alkanes(vLCCA: C>20) or Chlorinated Alkanes of an Unspecified Chain Length	P	All Products - unless SCCA content is affirmed to be 0% (k)	0% (i)	Immediate
16.4	Substances related to chlorinated alkanes that might contain Short Chain Chlorinated Alkanes/Alkenes (SCCAs)	P	All Products - unless SCCA content is affirmed to be 0% (k)	0% (i)	Immediate
18	Chlorinated Hydrocarbons (Select CAS) (ww)	P			
18.1	Chlorinated Hydrocarbons (Select CAS) (ww)	P	All Products	0% (i)	Immediate
18.2	Chlorinated Hydrocarbons (Select CAS) (ww)	P	All Products	0.1%	Immediate

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RSMS Row Number	Substance Category	Classification (Restriction Level)	Applications Affected (Comments)	Threshold (Percent)	Effective Date
18.3	Chlorinated Hydrocarbons (Select CAS) (ww)	P	All Products	0.1%	Immediate
18.4	Chlorinated Hydrocarbons (Select CAS) (ww)	P	All Products	0% (i)	Immediate
18.5	Chlorinated Hydrocarbons (Select CAS) (ww)	P	Paint strippers	0% (i)	Immediate
18.6	Chlorinated Hydrocarbons (Select CAS) (ww)	P	Cleaning products and Aftermarket non-dimensionals (l)	0% (i)	Immediate
18.7	Chlorinated Hydrocarbons (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
19	Chlorinated Naphthalenes	P	All Products	0% (i)	Immediate
20	a-chlorotoluene (benzyl chloride) and its hydrolysates (Select CAS) (ww)	P			
20.2	a-chlorotoluene (benzyl chloride) and its hydrolysates (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
21	Chromium(VI) (Cr+6; Hexavalent) and its compounds	P			
21.1	Chromium(VI) (Cr+6; Hexavalent) and its compounds	P	All Products (Cement additives, leather articles, and some textiles are prohibited at lower thresholds in the below subsections)	0.1%	Immediate
21.2	Chromium(VI) (Cr+6; Hexavalent) and its compounds	P	All Products (xx) (Cement additives, leather articles, and some textiles are prohibited at lower thresholds in the below subsections)	0.1% (m)	Immediate
21.3	Common water soluble chromium(VI) (Cr+6; Hexavalent) compounds	P	Cement additives	0.0002% (kkkk)	Immediate
21.6	Chromium (VI) (Cr+6: Hexavalent) and its compounds subject to the Canadian Chemical Challenge Program - Phase I (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
23	Cyclohexane	P	Neoprene-based contact adhesives for supply to the general public (after market) where the package size exceeds 350g (lll)	0.1%	Immediate
24	Dichloro-diphenyl-trichloro-ethane (DDT)	P	All Products	0% (i)	Immediate
25	Diisocyanates	P			Immediate
25.1	Methylenediphenyl diisocyanate (MDI) and its isomers (Select CAS) (ww)	P	All non-dimensional products supplied to the general public (aftermarket) unless protective gloves are provided and product labeling per REACH Annex XVII, Entry 56 is included (except for hot melt adhesives)	0.1%	Immediate
25.2	Other diisocyanates with O = C=N-R-N = C=O, with R an aliphatic or aromatic hydrocarbon unit of unspecified length	P	All non-dimensional products for EU only, unless product labeling per REACH Annex XVII, Entry 74 is included	0.1% (s)	Immediate
26	N,N-dimethyl formamide	P		0.3%	Immediate
26.2	N,N-dimethyl formamide	P	All non-dimensional products (mmm)	0.3%	12-Dec-2023
29	Fluorinated Gases (ww)	P			
29.1	Fluorinated Gases (Select CAS) (ww)	P			
29.11	Fluorinated Gases (Select CAS) (ww)	P	All applications in the United States other than the following uses: 1. As a refrigerant in new vehicle air conditioning systems in new vehicles 2. Recharging of vehicle air conditioning systems by the OEM (where the substance was originally incorporated into the vehicle system) 3. Consumer products used to recharge the vehicle air conditioning systems where the substance was originally used to charge the system by the OEM	0% (i)	Immediate
29.12	Fluorinated Gases (Select CAS) (ww)	P	Propellants	0% (i)	Immediate
29.13	Fluorinated Gases (Select CAS) (ww)	P	All Products except heat transfer fluids	0% (i)	Immediate
29.2	Fluorinated Greenhouse Gases with a Global Warming Potential (GWP)	P			
29.21	Fluorinated Greenhouse Gases with a GWP ≤150 or an unpublished GWP (Select CAS)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
29.23	Fluorinated Greenhouse Gases with Global Warming Potential (GWP) >150	P	Vehicle refrigerants or refrigerant blends in all M1 or N1 Class I vehicles produced for Europe; Tires in EU (y)	0% (i)	Immediate
29.24	Fluorinated Gases with a Global Warming Potential of ≥2500	P	Stationary refrigeration equipment (r) - except servicing existing equipment where legally permitted	0% (i)	Immediate
29.25	Fluorinated Gases with a Global Warming Potential of ≥1000	P	Motor vehicle air conditioning (new equipment in passenger cars and light-duty trucks only) in the United States	0% (i)	Immediate
29.3	Hydrofluorocarbons	P			

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29.31	Hydrofluorocarbons with Global Warming Potential (GWP) >150	P	Technical aerosols and foams in EU (y)	0% (i)	1. Immediate for technical aerosols & extruded polystyrene foams 2. 1-Jan-2023 for other foams
29.36	Hydrofluorocarbons (Select CAS) (ww)	P	Vehicle refrigerants or refrigerant blends in vehicles manufactured in Canada	0% (i)	Immediate
29.4	Perfluorocarbons and HFC-23	P	Fire protection systems and fire extinguishers in Europe	0% (i)	Immediate
30	Formaldehyde and formaldehyde compounds (Select CAS) (ww)	P			
30.1	Formaldehyde (Free)	P			Immediate
30.11	Formaldehyde (Free)	P	Detergents and cleaners for general public use (aftermarket products) in Germany	0.2%	Immediate
30.2	Formaldehyde reaction products (Select CAS) (ww)	P	All Products	0.1%	Immediate
30.3	Formaldehyde compounds (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
31	Glycol ethers and glycol ether acetates (Select CAS) (ww)	P			
31.1	2-Methoxyethanol (2ME)	P			Immediate
31.11	2-Methoxyethanol (2ME)	P	All Products except semiconductors	0% (i)	Immediate
31.2	2-Butoxyethanol	P	All Products listed below for indoor use except: (a) in a manufacturing or processing activity; (b) in a commercial activity as paints or coatings, including automobile refinish coatings; (c) as a solvent in a laboratory for analysis; (d) in scientific research; or (e) as a laboratory analytical standard. Affected activities may include FCSD, PDCs, and R&S.	Various (n)	
31.21	2-Butoxyethanol	P	Automobile Cleaner (not automobile degreasers or internal engine cleaners)	10% (n)	Immediate
31.22	2-Butoxyethanol	P	Rug or carpet Cleaner	10% (n)	Immediate
31.23	2-Butoxyethanol	P	Paint stripper or thinner	0.5% (n)	Immediate
31.24	2-Butoxyethanol	P	Any Other Aerosol Cleaner (products other than automobile degreasers used to degrease and clean glass, floors and other surfaces)	5% (n)	Immediate
31.25	2-Butoxyethanol	P	Any Other Non-Aerosol Cleaner (products other than automobile degreasers used to degrease and clean glass, floors and other surfaces)	6% (n)	Immediate
31.26	2-Butoxyethanol	P	Non-aerosol Paint or Coating	0.5% (n)	Immediate
31.27	2-Butoxyethanol	P	Aerosol Paint or Coating	0.1% (n)	Immediate
31.3	Other Glycol Ethers (Select CAS) (ww)	P			Immediate
31.31	2-(2-butoxyethoxy)ethanol (DEGBE)	P	Aftermarket spray paints and aerosol spray cleaners in aerosol containers	3% (o)	Immediate
31.32	Bis(2-methoxyethyl) ether	P	All Products	0.1%	Immediate
31.33	2-ethoxyethanol (2-EE)	P	In order to use these substances in the US, Ford personnel must confirm all requirements of the SNUR associated with the substance is met	0% (i)	Immediate
31.4	Glycol ether acetates (Select CAS) (ww)	P	In order to use these substances in Canada and/or US, Ford personnel must confirm all requirements of the SNAc [See NSNR (ccc)] or SNUR associated with the substance is met	0% (i)	Immediate
31.5	2-(2-methoxyethoxy)ethanol (DEGME)	P			Immediate
31.51	2-(2-methoxyethoxy)ethanol (DEGME)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
31.52	2-(2-methoxyethoxy)ethanol (DEGME)	P	Aftermarket paints, paint strippers, cleaning agents, and self-shining emulsions other than formulations for use in an industrial or commercial application.	0.1%	Immediate
32	Halogenated polyphenyls, diphenyl ethers and phosphates	P			
32.1	Hexabromo-cyclododecane (HBCD)	P	All Products	0% (i)	Immediate
32.2	Polybrominated biphenyls (PBB)	P			Immediate
32.21	Polybrominated biphenyls (PBB)	P	All Products	0% (i)	Immediate
32.23	Polybrominated biphenyls (PBB)	P	All products except textiles likely to be in contact with the skin	0.1%	Immediate
32.3	Polybrominated diphenyl ethers (PBDE)	P	All Products	0% (i)	Immediate
32.4	Polychlorinated biphenyls (PCB)	P	All Products	0% (i)	Immediate
32.5	Polychlorinated terphenyls (PCT)	P	All Products	0% (i)	Immediate
32.6	Halogenated Phosphates	P			Immediate
32.61	Tris(2,3-dibromopropyl)phosphate [TRIS]	P	All Products	0% (i)	Immediate

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32.62	Tris(2-chloroethyl) phosphate	P	All Products	0% (i)	
34	Hydrazine Compounds (Select CAS) (ww)	P			
34.1	Hydrazine Compounds (Select CAS) (ww)	P	All Products in Thailand	0% (i)	Immediate
34.2	Hydrazine Compounds (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
35	Hydrogen peroxide	P	Shall not be made available to or introduced, as a substance or a mixture, to the general public (after market) in the EU only	12%	Immediate
36	2,4-Imidazolidinedione, bromochloro-5,5-dimethyl	P	In order to use these substances in the US, Ford personnel must confirm all requirements of the SNUR associated with the substance is met	0% (i)	Immediate
37	Ketones (Select CAS) (ww)	P			
37.1	Ketones (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
37.2	Methyl-n-butyl ketone	P	In order to use these substances in Canada and/or US, Ford personnel must confirm all requirements of the SNAc [See NSNR (ccc)] or SNUR associated with the substance is met	0% (i)	Immediate
38	Lead and its compounds	P			
38.1	Lead and its compounds	P	All products (ppp,d) Some exemptions may apply (hh) Paints, PVC artificial leather, and some textiles are prohibited at lower thresholds in the subsections below.	0.1%	Immediate
38.2	Lead and its compounds (Select CAS) (ww)	P	Paints and products intended for use in paint	0% (i)	Immediate
39	Mercury and its compounds	P	All Products: Some exemptions may exist for facility research applications.	0% (i)	Immediate
40	Methanol	P			
40.1	Methanol	P	Car care products and windshield washer fluid for use in Russia	3%	Immediate
40.3	Methanol	P	Windshield washing or defrosting fluid supplied to the general public in the European Union, or in any vehicle imported into the European Union	0.6%	Immediate
40.4	Methanol	P	For spray painting use in Australia	1%	Immediate
40.5	Methanol	P	Products for use in Thailand intended for spraying and those that contact skin	0% (i)	Immediate
41	Methyl carbamate (Carbamic acid, methyl ester)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
42	Methylcyclopentadienyl manganese tricarbonyl (MMT)	P	Fuel in EU	0.0002% Mn/L	Immediate
44	N,N-dimethylacetamide (DMAC)	P	Textiles under normal or reasonably foreseeable conditions of use, that come into contact with human skin to an extent similar to clothing	0.3%	Immediate
45	Nickel and its compounds	P			
45.3	Nickel compounds subject to a Canadian SNAc (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
46	Nitrogen compounds (Select CAS) (ww)	P			
46.1	N-Nitrosamines/N-Nitrosamides (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
46.2	N-Nitrosamines/N-Nitrosamides	P	Corrosion inhibitors, anticorrosion greases, waxes and other agents, metal working fluids, and water-miscible or water-mixed cooling lubricants, containing mixtures of nitrites and amines/ amides that may form N-Nitrosamines/Nitrosamides	Substance Specific (see substances (ww) to determine threshold): 0.0005%, 0.0001%, 0.1%, or 0% (i)	Immediate
46.3	N-Nitrosodimethylamine, which has the molecular formula C2H6N2O	P	All Products	0% (i)	Immediate
46.4	Nitrosating Agents (j)	P	Corrosion inhibitors, anticorrosion greases, waxes and other agents, metal working fluids, and water-miscible or water-mixed cooling lubricants, containing mixtures of nitrites and amines/ amides that may form N-Nitrosamines/Nitrosamides	0% (i)	Immediate
46.5	Nitric acid	P	Shall not be made available to or introduced, as a substance or a mixture, to the general public (after market) in the EU only	3%	Immediate

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46.6	Nitromethane	P	Shall not be made available to or introduced, as a substance or a mixture, to the general public (after market) in the EU only	16%	Immediate
47	Nonylphenols and their ethoxylates	P			
47.1	Nonylphenols	P	Detergent (surfactants) and cleaners, metal working products, coformulants of pesticides and biocides, Cooling Tower Chemicals and WWTP (b) chemicals, and any products added to waters that enter surface waters, cooling towers, and/or WWTP	0.1% (mm)	Immediate
47.2	Nonylphenol Ethoxylates	P			
47.21	Nonylphenol Ethoxylates (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
47.22	4-Nonylphenol, branched and linear, Ethoxylated	P	All Products	0.1% (mm)	Immediate
47.23	Nonylphenol Ethoxylates	P	Detergent (surfactants) and cleaners, metal working products, coformulants of pesticides and biocides, Cooling Tower Chemicals and WWTP (b) chemicals, and any products added to waters that enter surface waters, cooling towers, and/or WWTP	0.1% (mm)	Immediate
48	Octylphenols and their ethoxylates	P			
48.1	Octylphenols (molecular formula C14H22O) and their ethoxylates	P	Metal working agents and cleaning products (including general purpose cleaners, car shampoos, metal cleaners, and engine cleaners)	0.1% (a)	Immediate
48.2	Octylphenols and their ethoxylates (Select CAS) (ww)	P	All Products	0.1% (mm)	Immediate
49	Organo-Tin compounds	P			
49.1	Diorgano-Tin compounds (e.g. dialkyl-tin compounds)	P			
49.11	Dibutyltin (DBT)	P	All aftermarket products for supply to general public	0.1% (hhh)	Immediate
49.12	Dibutyltin (DBT)	P	All non-dimensional products where the substance is acting as a biocide in free association paint or when used to treat industrial waters	0% (i)	Immediate
49.14	Dioctyltin (DOT)	P	All non-dimensional products where the substance is acting as a biocide in free association paint or when used to treat industrial waters	0% (i)	Immediate
49.2	Triorgano-Tin compounds	P			
49.21	Tributyltin compounds	P	All products	0% (i)	Immediate
49.22	Other triorganotin compounds (not tributyl tins) (Select CAS) (ww)	P	All Products in Thailand	0% (i)	Immediate
49.23	Trialkyltin hydroxides and their salts (including oxides)	P	All non-dimensional products In South Korea	0.1%	Immediate
49.25	Other triorganotin compounds (not tributyl tins)	P	All non-dimensional products where the substance is acting as a biocide in free association paint or when used to treat industrial waters	0% (i)	Immediate
49.3	Other organotin compounds (not dibutyl-, dioctyl- or triorganotins)	P	All non-dimensional products where the substance is acting as a biocide in free association paint or when used to treat industrial waters	0% (i)	Immediate
50	Oxiranes (Epoxides) (Select CAS) (ww)	P			Immediate
50.1	2-(Phenoxymethyl)oxirane (Phenyl glycidyl ether)	P	All Products in Thailand	0% (i)	Immediate
50.2	Oxiranes (Epoxides) (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
51	Ozone Depleting Substance (see definition in Appendix 1 of RSMS)	P			
51.1	Ozone Depleting Substances (Class I), Montreal Protocol: Annex A: All, Annex B: All, Annex C: Groups II and III & Annex E)	P			
51.11	Ozone Depleting Substances (Class I), Montreal Protocol: Annex A: All, Annex B: All, Annex C: Groups II and III & Annex E)	P	All Products	0% (i)	Immediate
51.2	Ozone Depleting Substances (Class II): Montreal Protocol Annex C Group I (HCFCs)	P	All Products - except those used to service existing equipment where legally permitted	0% (i)	Immediate
52	Pentachlorophenol (PCP) and associated substances	P			
53	Perfluoroalkyl compounds (Includes: Perfluoroalkyl sulfonates e.g., PFAS, fluorotelomers, and telomere-based polymeric substances)(zz)	P			
53.1	Perfluoro-octanoic acids (PFOA), its salts, and related compounds (uuu)	P			

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53.11	Perfluoro-octanoic acids (PFOA), and its salts, (uuu)	P	All Products (iii)	0% (uu)	Immediate
53.12	Perfluoro-octanoic acids (PFOA) related substances	P	All Products (iii)	0% (uu)	Immediate
53.2	Perfluorooctane sulfonic acid (PFOS) and its derivatives C8F17SO2X (X = OH, Metal salt (O-M+), halide, amide, and other derivatives including polymers)	P	All Products	0% (uu)	Immediate
53.3	Long-chain (C8-C21) PFCAs, their salts, and their precursors (vvv)	P	All non-dimensional products and the use of LCPFACs as a component of surface coatings on dimensional products (iii)	0% (i)	Immediate
53.5	PFAS defined as any member of the class of fluorinated organic chemicals containing at least one fully fluorinated carbon atom	P	Firefighting foam (zz)	0% (i)	Immediate
54	Phenol Substances and Phenol Derivatives (Select CAS) (ww)	P			
54.2	Phenol-Based UV Absorbers (Select CAS) (ww)	P	All Products (mm)	0.1%	27-Nov-2023 (all applicable jurisdictions except Switerland) 2-Aug-2024 (Switzerland)
54.3	Phenol Substances and Phenol Derivatives (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
54.5	Phenol, isopropylated phosphate (3:1)	P	All non-dimensionals (except for lubricants and greases, and all non-vehicle dimensional applications in the US only Adhesives and sealants are listed in the subsection below with a future prohibition date	0% (i)	31-Oct-24
54.6	Phenol, isopropylated phosphate (3:1)	P	Adhesives and sealants in the US only	0% (i)	6-Jan-25
55	Phosphoric acid, iron(2+) lithium salt (1:1:1)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
56	Phthalates	P			
56.1	Phthalates (Select CAS) (ww)	P	All products	0.1%	Immediate
56.4	Phthalates (Select CAS) (ww)	P	All Products (subject to future EU REACH Authorisation, see effective date)	0.1%	27-Feb-2023
56.6	Phthalates (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met (ccc)	0% (i)	Immediate
57	Poly(oxy-1,2-ethanediyl), α-[2(or 4)-tetrapropenylphenyl]-ω-hydroxy-	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
58	Polycyclic aromatic hydrocarbons (PAH; PCAH) - base oils (Select CAS) (ww)	P			
58.1	Polycyclic aromatic hydrocarbons (PAH; PCAH) - base oils (Select CAS) (ww)	P	Non-dimensionals and Non-dimensional aftermarket products (bb)	3% Extractables by IP346 (total PAH content per basestock) (e)	Immediate
58.2	Polycyclic aromatic hydrocarbons - base oils (PAH; PCAH) (Select CAS) (ww)	P	Non-dimensionals and Non-dimensional aftermarket products (bb)	0.1%	Immediate
59	Polycyclic aromatic hydrocarbons (PAH; PCAH) (Select CAS) (ww)	P			
59.1	Polycyclic aromatic hydrocarbons (PAH; PCAH) (Select CAS) (ww)	P	Extender oils including those used for the production of tires or parts of tires (gg)	0.0001% BaP and 0.001% total listed PAHs	Immediate
59.5	Polycyclic aromatic hydrocarbons (PAH; PCAH) (Select CAS) (ww)	P	Paints and varnishes in an uncured state for sale to the general public (after market)	0.01% total listed PAHs	Immediate
59.7	Polycyclic aromatic hydrocarbons (PAH; PCAH) (Select CAS) (ww)	P	All Products	0.1%	Immediate
60	Products of Endangered Species	P	All Products	0% (i)	Immediate
61	n-propyl bromide	P	All Products	0.1%	Immediate
62	Pyrrolidones - Select CAS (ww)	P			
62.1	Pyrrolidones - Select CAS (ww)	P	All non-dimensional products in jurisdictions following EU REACH except for use as a solvent or reactant in the process of coating wires	0.3%	Immediate
62.2	Pyrrolidones - Select CAS (ww)	P	Solvents or reactants used in jurisdictions following EU REACH for the process of coating wires	0.3%	9-May-2024
62.4	Pyrrolidones - Select CAS (ww)	P	Paint strippers used in the EU for the removal of PAH containing coatings	0% (i)	Immediate
63	Quinoline	P			

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RSMS Row Number	Substance Category	Classification (Restriction Level)	Applications Affected (Comments)	Threshold (Percent)	Effective Date
63.1	Quinoline	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
63.2	Quinoline	P	Textiles under normal or reasonably foreseeable conditions of use, that come into contact with human skin to an extent similar to clothing	0.005%	Immediate
64	Radioactive isotopes and substances, all members	P	All Products, including scrap metal contaminants. Excludes substances and devices used in the manufacturing process	(jj)	Immediate
65	5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [1], 5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2] [covering any of the individual stereoisomers of [1] and [2] or any combination thereof] (Select CAS) ww	P	All Products	0.1%	27-Nov-2023
66	Selenium and selenium-containing substances	P	All non-dimensional products in Egypt	0% (i)	
67	Silica, Crystalline - Quartz	P	Materials used in abrasive blasting	1%	Immediate
68	Siloxanes and Silanes (Select CAS) (ww)	P			
68.1	Siloxanes (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
68.2	Siloxanes (Select CAS) (ww)	P	Soaps and hand cleaners	0.1%	Immediate
68.3	Silanes	P			
68.31	Polyfluoroctyl trialkoxysilanes (TDFAs)	P	Spray products for the general public (aftermarket) in the EU including aerosol dispensers, pump sprays, and trigger sprays	0% (i)	Immediate
68.32	Silanes (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
69	Sulfur compounds (Select CAS) (ww)	P			
69.1	Sulfur, sulfate and sulfide compounds (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
69.2	Sulfur, sulfate and sulfide compounds (Select CAS) (ww)	P	All non-dimensional products in Australia only	0.1%	Immediate
69.3	Sulfuric acid	P	Shall not be made available to or introduced, as a substance or a mixture, to the general public (aftermarket) in the EU only	15%	Immediate
70	Sultones (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
71	5-tert-butyl-2,4,6-trinitro-m-xylene (Musk xylene)	P	All Products	0.1%	Immediate
74	Trixylyl phosphate	P	All Products in countries with REACH-like regulations	0.1%	27-May-2023 (all applicable jurisdictions except Switzerland) 02-Feb-2024 (Switzerland)
75	Ugilec 141 (Monomethyl tetrachlorodiphenyl methane)	P	All Products	0% (i)	Immediate
76	Urea Compounds (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
77	Vanadium Compounds (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
78	Vinyl Compounds (Select CAS) (ww)	P			
78.1	Vinyl Chloride	P			Immediate
78.12	Vinyl Chloride	P	Aerosols	0% (i)	Immediate
78.13	Vinyl Chloride	P	All Products-Thailand and Australia only	0% (i)	Immediate
78.2	Vinyl Compounds (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
79	Zinc Salts (Select CAS) (ww)	P	In order to use these substances in Canada, Ford personnel must confirm all requirements of the SNAc associated with the substance is met. See NSNR (ccc)	0% (i)	Immediate
80	Declarable Substances (ww)	D	All Products	(v)	Immediate

TOP

Footnotes:

a) The listed prohibition does not apply to metalworking agents for use in controlled closed systems where the washing liquid is recycled or incinerated

b) Waste Water Treatment Plant

c) Benzidine and Benzidine Dihydrochloride are prohibited at any concentration if intentionally added at any concentration for the Canadian market. Benzidine or its salts are prohibited above 0.002% for all other markets. Note: "Intentionally added" means all substances directly added to the formulation.
d) Suppliers must self-certify compliance using a testing certification agency as specified in the California Implementing Regulation CCR Title 22, Chapter 30 Secs 66387.1-66387.9 available at https://govt.westlaw.com/calregs/Browse/Home/California/CaliforniaCodeofRegulations?guid=I308280BB8C7640388F102D954F3D6CB2&originationContext=documenttoc&transitionType=Default&contextData=(sc.Default) and/or the Washington State Brake Friction Law Chapter 70.285 RCW; Implementing Rule Chapter 173-901 WAC available at https://fortress.wa.gov/ecy/publications/documents/1204027.pdf (see WAC 173-901-060).
e) The listed Petroleum mineral oil base stocks in lubricants are prohibited for supply to the general public if total extractable polyaromatic hydrocarbon content is ≥3% as measured by Institute of Petroleum standard IP346 (a.k.a. EI346). Included substances are given a threshold of 0% to allow Ford a means to identify affected products and determine total PAH level.

f) See http://www.chemicalsubstanceschimiques.gc.ca/plan/approach-approche/index-eng.php for CAS #s requiring declaration at any concentration in both IMDS for dimensional materials (hard-parts) and COVISINT – GMAP-e1291 for non-dimensional materials (chemicals) to allow Ford to meet applicable reporting requirements. Declaration is required for all listed substances.

g) Declaration required at any concentration above detection limits where testing has been performed. No additional testing required, however reasonable and expected declaration from sub-suppliers to main suppliers is expected where supplier has knowledge of its remaining presence in their final product.

h) Consistent with the Canadian Chemical Challenge regulations, Ford requires declaration at any concentration to all substances listed in footnote-f above in both IMDS (hard-parts) and COVISINT (non-dimensional chemicals) where it is reasonable to expect that the supplier has knowledge of its remaining presence in their final product (no testing is required). NOTE: GADSL lists only a subset of the Canadian Chemical Challenge substances that are suspected to be found in automotive hard-parts. See the GADSL list at http://www.gadsl.org/ for subset listing. Ford requirements for establishing compliance are greater than those of GADSL and require declaration for all Canadian Chemical Challenge substances at any concentration intentionally added or otherwise. Hard-part suppliers must review the entire Canadian Chemical Challenge list found in footnote (f), and if any substance is known to remain on the hard-part after manufacture, must declare the substance in IMDS. The GADSL list and thresholds with regard to the Canadian Chemical Challenge substances should be considered as a sub-set of the full requirement, and only be used as a reference, when reporting for purposes of sale to Ford.

i) If intentionally added at any concentration.
"Intentionally added" means all substances directly added to the formulation.
"Incidental presence" means a residual, a trace contaminant or impurity that was not intentionally added to the formulation.

j) See regulations TRGS 611: Restrictions on the use of water-miscible or water-mixed cooling lubricants whose use can result in the formation of N-nitrosamines (https://www.baua.de/EN/Service/Legislative-texts-and-technical-rules/Rules/TRGS/TRGS-611.html) and TRGS 615: Restrictions on the use of anticorrosion agents whose use can lead to the formation of N-nitrosamines for classes of nitrosating agents (https://www.baua.de/DE/Angebote/Rechtstexte-und-Technische-Regeln/Regelwerk/TRGS/TRGS-615.html).

Footnotes:

k) Short chain chlorinated alkanes (SCCA) are defined using the most restrictive of global regulatory requirements, and are defined by the following broad equation: $C_nH_xCl_{(2n+2-x)}$ where n = 10 to 13. x is not bounded. This includes all alkanes (n-, -iso, aromatic).
--Mid-chain chlorinated alkanes (MCCA) are defined as having carbon chain length C14 to C17.
--Long-chain chlorinated alkanes (LCCA) are defined as alkanes/alkenes having carbon chain length C18-C20.
--Very Long-chain chlorinated alkanes (vLCCA) are defined as alkanes/alkenes having carbon chain length greater than C20.

Both non-dimensional and dimensional products containing medium, long, very long, or unspecified chain chloro-alkanes require documentation that their presence does not cause exceedance of the SCCA threshold of 0.0% by weight. To have these products accepted, you must provide a letter to Ford affirming that these substances do not contain SCCAs.

l) See SR 814.81 Chemical Risk Reduction Ordinance (https://www.admin.ch/opc/en/classified-compilation/20021520/index.html) for products defined as cleaning products in the regulation.

m) A maximum value of 0.1% by weight, of Hexavalent Chromium, per homogenous material is allowed. For coated products, this percentage is based on the weight of any coating containing Hexavalent Chromium, not the part weight.

n) Exceedance to threshold limits for select products requires permits, see:http://www.ec.gc.ca/toxiques-toxics/7A9E5803-0737-408A-97D9-5C7997127128/2be_Permit_Ap_Frm_e.pdf Manufacture, sale or import of products containing 2-butoxyethanol above thresholds listed in Schedule I is prohibited unless: 1) the product is diluted before use so that the 2-butoxyethanol levels are below the thresholds set in Schedule 1; OR 2) a permit has been issued. See http://laws-lois.justice.gc.ca/eng/regulations/SOR-2006-347/page-1.html

o) Paints, other than spray paints, containing DEGBE in a concentration of 3% or more by mass and intended for supply to the general public must be labelled as follows: "Do not use in paint spraying equipment."

p) Content Deleted.

q) Content Deleted

r) The prohibition is not applicable to equipment intended to cool products to temperatures below – 50 °C

s) The supplier must ensure that Ford, as the the recipient of the substance(s) or mixture(s) containing one or more of these substances above 0.1%, is provided with information on the requirements referred to in REACH Annex XVII, Entry 74, point (b) of paragraph 1 and the following statement is placed on the packaging, in a manner that is visibly distinct from the rest of the label information: “As from 24 August 2023 adequate training is required before industrial or professional use”. After 24 August 2023, the supplier shall meet the labeling requirements as of 24 February 2022 and shall supply Ford with training materials and courses that cover the elements specified in REACH Annex XVII, Entry 74, paragraphs 4 and 5 in the official language(s) of the Member States where the products are supplied.

t) Nickel Substances are not prohibited per se, but are subject to a Nickel release rate threshold of 0.5 ug/cm2/week as noted in the subsection header. Individual substances are listed with a threshold of 0% to help Ford identify affected products.

u) If intentionally added at 0.003% for interior vehicle use, or 0.006% for exterior vehicle use

v) All listed substances must be declared at the detection limit for the substance based on standardized testing methodologies.

Footnotes:

w) See http://www.endangeredearth.com/endangered-species-laws-u/ for a list of endangered species regulations by country.

x) Allowable benzene levels in fuel are subject to regional regulations such as EU-D 98/70/EC.

y) Except when required to meet national safety standards

z) Per EU REACH Annex XVII, Entry 72 and Appendix 12, threshold is expressed as metal that can be extracted from the material.

aa) The nickel release rate shall be determined by test method BS EN 1811:2011 +A1:2015. The method can be obtained at http://shop.bsigroup.com/ProductDetail/?pid=000000000030316120

bb) If the non-dimensional serves a purpose/function and will not release from the article or the article cannot be used without this non-dimensional then it is exempt

cc) The overall threshold for these listed phthalates as defined in the REACH regulation Annex XVII, item 72 (and Appendix 12) is 1000 mg/kg. This threshold applies to each listed substance individually or in combination with other phthalates listed in that entry or in other entries of Annex XVII that are classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 in any of the hazard classes carcinogenicity, germ cell mutagenicity or reproductive toxicity, category 1A or 1B.

dd) An exemption to this restriction for DEHP exists for non-vehicle rubber components of engine systems; this exemption is in effect until 7January 2024. Until that time DEHP is allowed at (a) 30% by weight of the rubber for gasket coatings, solid rubber gaskets and rubber components included in assemblies of at least three components using electrical, mechanical or hydraulic energy to do work, and attached to the engine, and (b) at 10% by weight of the rubber for rubber-containing components not referred to in point (a).

ee) The listed phthalates are prohibited individually or in any combination at a level of 0.1%. Each individual substance is given a threshold of 0% to help Ford identify affected products.

ff) This substance is impacted by a Canadian Significant New Activity (SNAc). To determine applicable volume thresholds, concentrations and/or applications affected, please review the Canada Gazette notice by entering the CAS# at https://pollution-waste.canada.ca/substances-search/Substance?.

gg) EN 16143:2013 should be used for demonstrating conformity with the limits per EU-R 2015/326. Each individual substance is given a threshold of 0% to help Ford identify affected products.

hh) Exemptions for lead use are specified in RoHS Recast Annex III EU-D 2011/65 and the and the CURRENT ELV Annex II [EU-D 2000/53] and its amendments (https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:02000L0053-20200306&from=EN). Once the ELV Annex II exemption expiration date passes the prohibition is effective immediately regardless of vehicle/type approval date. Other exemptions may apply at the discretion of Ford Material Compliance - contact cshafer7@ford.com.

ii) Identified substances may not specifically be listed under every legal driver provided.

Footnotes:

jj) All products, including scrap metal contaminants: Radioactivity should meet "Unconditional Use Clearance Level" requirements consistent with International Atomic Energy Agency (IAEA) and the Commission of European Communities (CEC) standards for individual radionuclides IAEA-TECDOC-855 (1996) & Safety Series RS-G-1.7 (2004). (See RSMS Section 3.1.11). Radioactive sources used in manufacturing processes: are exempted if they meet exemption levels. Exempted sources typically include small sources of radiation such as tracers used in research, calibration sources and some consumer products containing small sources or low levels of activity per unit mass. The corresponding levels of activity or activity concentration are called exemption levels.

kk) Suppliers are responsible for identifying all substances present in the listed chemical families in the Critical Raw Materials List at https://ec.europa.eu/growth/sectors/raw-materials/specific-interest/critical_en

ll) Some exemptions may apply, please contact cshafer7@ford.com

mm) Aftermarket products are excluded in countries without REACH-like regulations.

nn) Substances listed at http://www.ec.gc.ca/ese-ees/default.asp?lang=En&n=72FC165E-1.

oo) Substances declarable globally at any concentration listed at:
http://www.chemicalsubstanceschimiques.gc.ca/group/boron-bore-eng.php#tbl1

pp) Substances declarable globally at any concentration listed at:
http://www.chemicalsubstanceschimiques.gc.ca/group/internat-eng.php

qq) All Cobalt and its compounds subject to the Canadian Challenge listed at:
http://www.chemicalsubstanceschimiques.gc.ca/group/cobalt-eng.php#tbl1

rr) Content deleted.

ss) Substances declarable globally at any concentration listed at:
http://www.chemicalsubstanceschimiques.gc.ca/group/diisocyanate-eng.php

tt) Substances declarable globally at any concentration listed at:
http://www.chemicalsubstanceschimiques.gc.ca/group/flame_retardant-ignifuges-eng.php

uu) The listed RSL threshold is for intentional addition of the listed substance (i.e., all substances directly added to the formulation). The unintentional presence (i.e., any residual, trace contamination or impurity that was not intentionally added) of listed substances shall not exceed the limits identified in EU-R 2019/1021 as amended, Annex I

vv) All Selenium and selenium-containing substances must be declared globally at any concentration in addition to the ones subject to the Canadian Challenge listed at:
http://www.chemicalsubstanceschimiques.gc.ca/group/selenium-eng.php#tbl1

ww) Please contact cshafer7@ford.com to request the full Ford Restricted Substances List (RSL).

xx) Laboratory use of listed chemicals is allowed.

yy) Declarable substance categories with no listed legal driver are used to capture chemicals that are of the same chemical family as those currently regulated, but that may be subject to future regulation, have pending regulation, or are members of other categories but defined by the listed chemical category.

Footnotes:

zz) Unless an RSL section/subsection is noted as "Select CAS", substances not listed may still be subject listed legal driver(s), based on the chemical category definition. It is the responsibility of the supplier to confirm that any substances in products provided to Ford are not directly listed in the RSL (and subsequentluy restricted) or do not meet the category definition as defined in the legal driver and therefore also restricted. For informational purposes only, a listing of PFAS substances specified by a global regulatory or technical body are provided as a list.

aaa) The regulatory drivers specified in the Legal requirements / regulations column for each section/subsection reflect the rationale for the inclusion of the section in the RSL. Individual substances within each section/subsection are either directly referenced by the specified regulations or reflect Ford's interpretation of those regulations.

bbb) As w/w of nitrogen in relation to ammonium nitrate

ccc) Regulatory ref: Significant New Activity (SNAc) Notices and associated New Substance Notification Requirements (NSNR).
Applicability: All* non-dimensional materials, and any dimensional materials (articles/parts) that can disperse matter during use, import, or processing (including manufacturing), that are: 1) destined for use in Canada, or 2) whose destination is unspecified or unknown at time of chemical disclosure, or 3) that are determined by Ford to be uncontrolled are included in the prohibition in affected applications in North America.
*Clarification: Non-dimensional fluids or particulate matter that remain contained within a manufactured item during normal use, or whose normal release of fluid or particulate matter is controlled and non-dispersive and is specific to the end use of the item (e.g., lubricants in motor vehicles are released within the engine but remains within the vehicle until replaced), are not included in the prohibition. In contrast, for example, substances in brake pads which are considered dispersive during use would be included in the prohibition if listed as an affected application.

ddd) A partial list of Country specific global regulations to implement the Rotterdam Convention covering PCB's can be found at the following link (where a particular country is not listed, suppliers of materials must refer to the Country's Federal Environmental Regulations directly). Note that this link provides the original implementation regulations only; please check the individual consolidated regulation listed for each country for any amendments and updates.
http://archive.pic.int/CH/Demo/embed/viewB_chemAnnexIII.php?chem=3982&show=importresponses&viewdetails=1.

eee) Applies to Parts or articles with predictable direct and prolonged or short-term repetitive contact with the human skin or the oral cavity under normal or reasonably foreseeable conditions of use to meet the threshold listed in REACH Annex XVII and ZEK01.4-08 Table 1 Cat 2

fff) Protection tools are recommended for operators who may have long-term skin contact, during the manufacturing process, with products potentially containing PAHs.

ggg) PAHs should not be used for deadener pads in APA above threshold noted. Any usage must be approved by APA Materials Engineering.

hhh) EU REACH Amendment 276/2010 Annex XVII, Entry 20 specifies that content at or above 0.1% by weight of tin is prohibited. The calculation of the tin content in the substance is done using the molecular weight of both tin and the substance. IMDS provided guidance for performing the calculation can be found at:
https://public.mdsystem.com/documents/10906/17094/faq_organo_tin_compounds.pdf

iii) Other exemptions supported by legislation may apply on a case by case basis and at the discretion of Ford Material Compliance - contact cshafer7@ford.com.

jjj) Content Deleted

Footnotes:

kkk) Requirements apply only to intended use as a biocide in a treated article or biocidal product, as defined by the Biocidal Products Regulation (BPR) EU-R 528/2012 and its amendments. The authorization and/or prohibition is dependent upon the substance, the end use (product type) and a supplier authorization. Substance/product type approval status can be found at: http://echa.europa.eu/information-on-chemicals/biocidal-active-substances. It is the responsibility of the supplier to evaluate any product containing a biocidal substance to confirm that the substance has been approved for the application. The supplier must also be an authorized supplier of the substance in the EU.

lll) Neoprene-based contact adhesives in sizes less than 350 g intended for supply to the general public and containing a concentration of 0.1% or more by mass of cyclohexane must be labelled as follows: 1) This product is not to be used under conditions of poor ventilation. 2) This product is not to be used for carpet laying.

mmm) This restriction is not applicable if the supplier has confirmed that worker inhalation and dermal exposures are ≤ 6 mg/m3 and ≤ 1.1 mg/kg/day, respectively.

nnn) Content deleted

ooo) Content Deleted

ppp) The EU RoHS Directive only applies to components that are within the scope of the EU RoHS II Directive (as amended); it does not apply to electrical or electronic devices specifically designed to be used in vehicles. However, other listed regulations restrict the lead and lead compounds in vehicle components.

qqq) Cadmium and its compounds are prohibited as noted below except in cases where it is used for safety purposes in vehicle and non-vehicle applications in the EU.

rrr) Content deleted.

sss) Content deleted.

ttt) The CAS numbers listed include tin, tantalum, and tungsten derivatives listed in the IMDS Conflict Minerals group.

uuu) Includes substances meeting the following definitions specified in PCTSR Schedule 2.1

- Perfluorooctanoic acid, which has the molecular formula $C_7F_{15}CO_2H$, and its salts; and
- Compounds that consist of a perfluorinated alkyl group that has the molecular formula C_nF_{2n+1} in which n = 7 or 8 and that is directly bonded to any chemical moiety other than a fluorine, chlorine or bromine atom.

vvv) Includes all perfluorocarboxylic acids that have the molecular formula $C_nF_{2n+1}CO_2H$ in which $8 \leq n \leq 20$ and their salts as specified in PCTSR Schedule 2.1.

www) This restriction is in place UNLESS the emission of ammonia from those mixtures or articles results in a concentration of less than 3 ppm by volume (2.12 mg/m3) in accordance with adaptations of Technical Specification CEN/TS 16516.

xxx) The following are the common industry standards for determining presence of asbestos fibers within materials: EPA 600/R-93/116 (as amended) is the industry standard in the US (and most countries with asbestos regulation) or NIOSH 9002. Appropriate quantitative analysis of asbestos by the EPA/NIOSH methods can include point counting, Transmission Electron Microscopy (TEM) or Scanning Electron Microscopy (SEM).

yyy) No Content

Footnotes:

zzz) Content Deleted

aaaa) Content deleted

bbbb) Content Deleted

cccc) Content Deleted

dddd) Where no CAS number for a substance is available but US TSCA Pre-Manufacture Notice (PMN) or Canadian DSL Accession numbers are listed in the applicable regulations, these are listed in the RSL in place of CAS#s. Material suppliers are obligated to provide this number as Non-CAS content in the formulation disclosure, and also with an accurate, descriptive Chemical Name, if applicable to the product.

eeee) Content deleted

ffff) Diethylene glycol methyl ether is prohibited at 0% if it contains greater than 5% 2-methoxy ethanol.

gggg) Content Deleted

hhhh) Content Deleted

iiii) Ford Motor Company requires suppliers to declare ALL substances in dimensional and non-dimensional products if present at or above 0.1 % (weight percent). Substances required to be reported below 0.1 % will be specifically listed in the RSMS/RSL for enhanced disclosure.

jjjj) No Content

kkkk) The standard adopted by the European Committee for Standardization (CEN) for testing the water-soluble chromium (VI) content of cement and cement-containing mixtures shall be used as the test method for demonstrating conformity.

llll) Content deleted

1 Procedure - Production Materials

1.1 IMDS Reporting Requirements

- **Reporting in IMDS:** Vehicle assembly material suppliers are required to report all hard parts (production and service), materials and substances remaining on a vehicle at point of sale via the International Material Data System (IMDS) http://www.mdsystem.com/, to Ford's databases [102] and / or [5117]. Deviating data submission is not allowed. Only component datasheets can be reported to [102], semi-components and materials datasheets must be reported to [5117]. **All Production parts** must be reported under the submission for the Tier 1 assembly, using the Ford released part number **by the program <PEC> milestone or 8 months before J1, whichever comes first.**
- **Reporting for Materials:** 100% materials, type and weight of all materials must be included. This includes any materials/substances that may be added during certain processing operations.
- **Current production and service parts** should have already been reported in IMDS. If they are not, or if an update is required, they must be reported immediately. For production end item assemblies, the service component parts that make up reported assembly must also be reported by their engineering numbers.
- **Service parts not common with production parts** and unique service parts must be reported 5 to 8 months before Job 1.
- **Reporting timing:** Full IMDS reporting and full compliance with this Standard must be achieved at the program <PEC> milestone or 8 months before J1, whichever comes first.
- Components for Powertrain programs, which follow Powertrain Unit GPDS program timing, must achieve full IMDS reporting and full compliance with this Standard at the Unit Tool Development gateway <Unit TD> or 8 months before Powertrain Job 1.
- **Reporting Concentration Ranges:** When reporting substance concentration ranges in IMDS, please be aware that the highest value in the range will be used to calculate concentration and threshold.
- **Reporting part list:** All the parts / materials that need to be reported will be posted in the Ford Global Materials Management (GMM) Supplier Portal.

These guidelines are applicable to supplies to Ford Motor Company (FMC) only. Ford will accept data sheets created following IMDS Recommendations as a minimum requirement.

1.1.1 Specific Data Submission Requirements

Non-dimensional materials (fuels, lubricant fluids, pasty greases, rust preventives, paints, polymers, adhesives and sealants, etc.) contained in or added on dimensional hard parts are required to be reported to Ford's IMDS database partition FPTO (IMDS Company ID: 5117). Paints, polymers, adhesives and sealants, etc., delivered to Ford in the *uncured* state and cured during the automobile manufacturing process need to be reported in IMDS **IN THE FINAL (CURED) STATE.** The *Internal Mat.-No.* in IMDS should be populated with the Ford Material Specification number and the Ford Toxicology number (if available) for the material. Example: Suppliers of polyurethane should report their material in the final cured state as polyurethane and not in the initial uncured state of diisocyanate and polyole.

For all non-dimensional parts listed on the BOMs (treated as regular hard parts, for details see section 1.10), suppliers should send the semi-component/material datasheet to Ford's IMDS database partition FPTO (IMDS Company ID: 5117) and await the responsible Ford engineering activity's approval. Upon approval, the supplier must send the datasheet as a pseudo-component level with a weight of 1 g to Ford's IMDS partition FMC (IMDS Company ID: 102).

Suppliers of **sheet metal/coated sheet metal** semi-components/materials and rough casting, process assemblies, purchased blanks and modified parts are only required to submit their semi-component/material datasheets to IMDS database partition FPTO (IMDS Company ID: 5117). The *Part/Item No.* field in IMDS should be populated with the special **Ford Part Number beginning with a six-digit prefix,** containing the **pre**-prefixes **PA, PB, PM or RF**. Pseudo-component level reporting to IMDS partition FMC (IMDS Company ID: 102) is no longer required.
A datasheet describing parts or materials for current or future production must not be blocked in its Recipient data section so that Ford can further reference the datasheet. If forwarding was originally not allowed the supplier is asked to send a new datasheet version including the required amendment.

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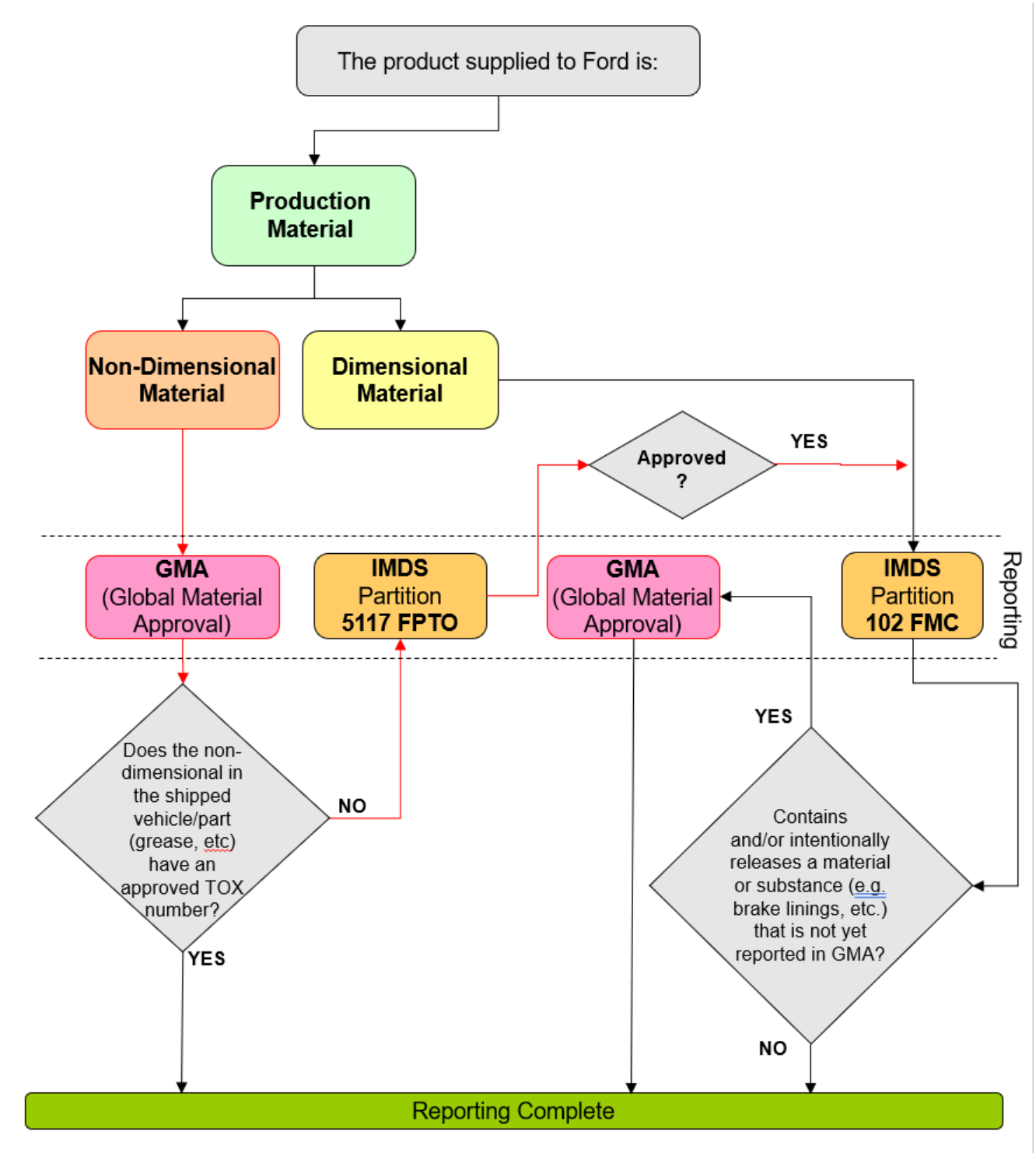

Fig. 1 **Production Material Reporting Pathways** (for material definition see section 3.3.1 in the Restricted Substance Management Standard main document)

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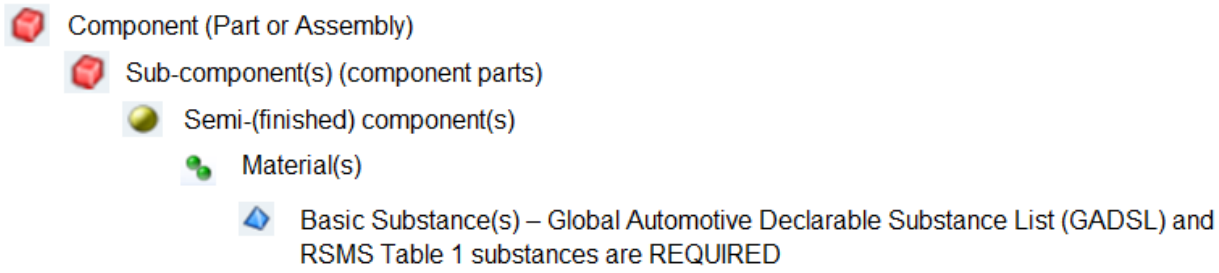
1.2 Component / Material / Basic Substance Content Disclosure – and Hierarchical Structure

The necessary information required in IMDS needs to be presented in a hierarchical structure. This can easily be done by building tree structured Material Data Sheets, comprising of:



Every component must have at least one material (or one component/sub-component with one material) associated with it. Total materials weight under the components (whether attached to a sub-component or not) has to be equal to the total component weight.

1.3 Sub-Component

This is a component added under the structure of a top-level component. The attributes are the same as for a component. When used, this must have at least one material associated with it. The total material weight under the sub-component has to be equal total sub-component weight.

1.4 Requirements for Production Materials (Assembly Components)

- The assembly component's ***stated*** mass on the top node of the component ("Measured Weight per item") must represent the ***real*** mass. Real masses are either derived from statistical product control cards or are determined by weighing a statistically relevant number of materials and calculating the statistical average (arithmetic mean).

- Component weight deviation ("Measured Weight" / "Calculated Weight", +/- %). The deviation values are checked at every component node level. The deviation between the measured component weight and the calculated weight must not exceed the following:

Weight of Component	Max. Deviation in %
< 1 g	+/- 100%
1 g - 99 g	+/- 10%
100 g - 999 g	+/- 5%
1.0 kg - 9.99 kg	+/- 2%
10 kg - 99.99 kg	+/- 1%
> 100 kg	+/- 0.5%

- Certify polymeric parts are appropriately marked according to the relevant legislation (see also Ford Engineering CAD & Drafting Standard E-3 in its latest version).

  When setting up an IMDS datasheet describing a vehicle component and comprising of polymeric (plastic) or elastomeric (rubber) material the field ***Parts Marking*** becomes visible requiring data entry. Using this field, you certify your company's products supplied to Ford are *physically* marked according to legal and standard requirements. The original legal parts marking requirement is the EU ELV Directive (2000/53/EC), Article 8.

  Please use the datasheet's pull-down bar to select your applicable answer out of three available standard clauses. Your datasheet will be rejected if your answer was "No". Datasheets marked "Not Applicable" will be reviewed by Ford and accepted or rejected depending on IMDS rules (For details see section 1.12). If further clarification is necessary, use the Help function in IMDS.

- Report percentage of recycled content in materials.

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1.5 Semi-(finished) Component

This is not the same thing as a sub-component within a part. The definition of a semi- (finished) component is an item with physical properties that will NOT be used in the final product without further improvement, i.e. leather that needs to be cut and sown into upholstery or the base for a cogwheel that needs further machining. There must always be at least one material associated to a semi- (finished) component.

1.6 Materials

- **Report 100% materials, type and weight of all materials.**
  - The sum of the material weight defines the total part/assembly weight.
  - Surface treatments, such as chromate passivation, should be entered as a separate material (attached to a semi-finished component).

1.7 Substances (Forming or Being Incorporated in Materials)

All substances **being ingredients of the material** contained in the ***Global Automotive Declarable Substance List*** (GADSL), **along with any additional or modified requirements specified in Attachment 2 of this Standard,** MUST be disclosed in IMDS**.**

- All substances identified in the GADSL and/or the RSL, that accompanies the RSMS Attachment 2, must be identified with the correct CAS number when reported in IMDS (except some Fibers which are not reported by CAS number).
- If a supplier reports a GADSL and/or RSL substance, that accompanies the RSMS **Attachment 2**, without the correct CAS number, they will NOT be fulfilling the requirements of this Standard.
- The use of non-CAS identified substances is acceptable for the reporting of substances NOT covered in the GADSL and/or the RSL that accompanies the RSMS **Attachment 2**.
- Paints, polymers, adhesives and sealants etc. must be reported in the cured state.
- Substances listed in RSMS SUBSTANCE RESTRICTIONS - **Attachment 2** associated RSL and/or GADSL must be reported in IMDS. “Conflict Minerals” as defined in section 1.14 must also be reported in IMDS. Conflict Minerals must not be marked as “Confidential” nor can the substances be hidden by using a wild card (“joker”) designation.

If the substance you need to report is not available in IMDS, please use the IMDS's Basic Substance Request option.

- Substances must be entered in the form as they exist in the material (i.e. elemental breakdown (C, H, N, O, etc.) for polymers is NOT acceptable).
- Basic Substance disclosure requirements will increase in the future. Datasheets with outdated levels of information may need revisiting in the future. Thus, Ford recommends that suppliers report their parts following IMDS minimum requirement recommendations published in the IMDS Recommendation page.
- If necessary, proprietary (i.e. trade secret) material composition information can be kept secret by hiding substances from reporting. Use the ***Confidential*** check box after having selected the substance to be hidden. Up to 5 % of the contained substances can be hidden by either blinding out the confidential information or by using wild cards like “Misc.”. Substances listed in Attachment 2 and GADSL cannot be hidden. Conflict Minerals must not be marked as “Confidential” nor can the substances be hidden by using a wild card (“joker”) designation.
- For some substances on the GADSL, the supplier must know the reason the substance is used. When sending the MDS to Ford, IMDS will require the selection of an APPLICATION ID for some substance on the GADSL.

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1.8 Reporting IMDS Datasheets

- **Proposing MDSs**
  All datasheets sent to Ford account 102 must be sent using the “Propose” function and not the “send” function.

- **Publishing Material Data Sheet (MDS)**
  This function is used to publish a MDS in the IMDS online system. **NOTE**: **Ford does not use published MDS**. Tier 1 suppliers must send MDS directly to Ford Motor Company.

- **Reporting and Updating IMDS Datasheets**
  IMDS reporting/updating is required when there is a change in part number or material(s). These requirements are outlined in Fig 2 below.

In addition, FORD may ask for updating legally required information of active spare parts and current production parts such as ELV application codes or Biocidal Product Regulation data.

Please note, every part number should receive a unique IMDS Module ID; suppliers should never use the same IMDS Module ID for multiple part numbers, including suffix bumps. For example, an AA suffix level and AB suffix level Should never have the same IMDS Module ID.

Suppliers of production/service parts that fall into the below categories must certify compliance to this Standard using the Ford certification page in IMDS.

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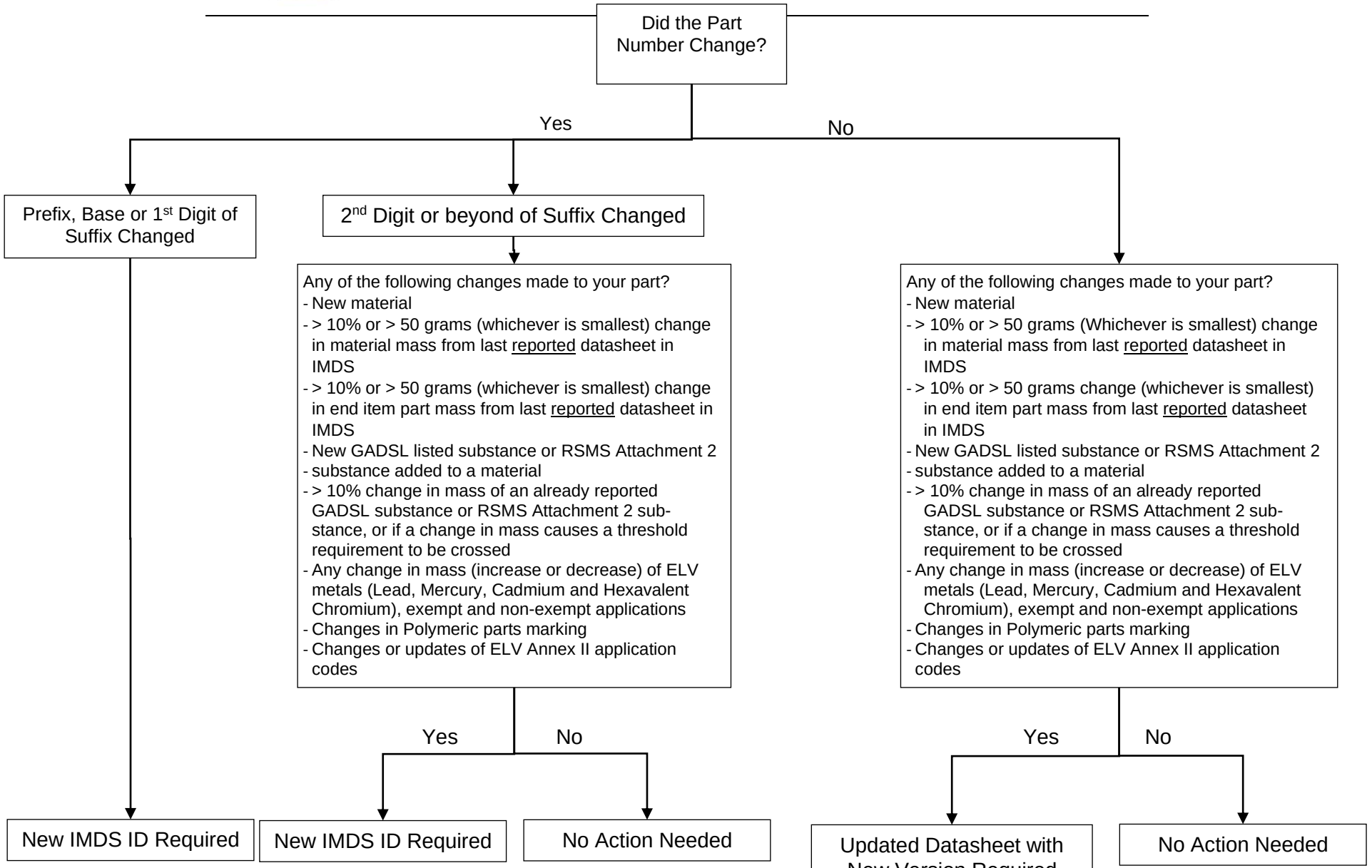

Fig. 2 **IMDS Reporting/Updating Pathways**

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1.9 Non-dimensional and Hazardous Articles Production Material Reporting

All non-dimensional production material suppliers must certify compliance to RSMS in Global Material Approval (GMA) with every data submission.
(https://fim.covisint.com/ap/ford?TARGET=https://www.gma.ford.com/)
See Section 3 for additional data reporting requirements.

1.10 China CAMDS Reporting Requirements

ELECTRONIC REPORTING USING THE CHINA AUTOMOTIVE MATERIAL DATA SYSTEM
(HTTP://WWW.CAMDS.ORG/)

ALL PARTS AND MATERIALS REMAINING ON CHINA LOCALLY PRODUCED VEHICLES AT POINT OF SALE AND ALL SERVICE PARTS ARE REQUIRED TO BE REPORTED USING CAMDS

- **Reporting in CAMDS**: Vehicle assembly material suppliers for China locally produced vehicles are required to report all hard parts (production and service), materials and substances remaining on a vehicles at point of sale via the CHINA AUTOMOTIVE MATERIAL DATA SYSTEM (CAMDS) http://www.camds.org/, to CHANGAN FORD's database [CA_3_24132] or JIANGLING MOTOR COMPANY's database [CA_3_31184] dependent on which plant the vehicle is built in China. Deviating data submission is not allowed. **All Production parts** must be reported under the submission for the Tier 1 assembly, using the Ford released part number.
- **Other Reporting Requirements** (Reporting for Materials, Reporting Timing, Reporting Concentration Ranges and Services Parts Reporting) will follow the same requirement of IMDS Reporting Requirements.

  If you have any question regarding CAMDS reporting please contact Janet Yin (WYIN4@ford.com).

1.11 Other Requirements

All Ford Motor Company dimensional materials (hard parts) and non-dimensional materials (treated as hard parts) Tier 1 suppliers must use Ford's *Global Material Management* system (GMM) as follows:

Suppliers access the GMM Supplier Portal:
https://fim.covisint.com/ap/ford?TARGET=https://fsp.covisint.com to check all the parts that need to be reported in IMDS and report the exact part numbers from the Portal into IMDS. This will help to match BOMs and eliminate non-value added work, and will resolve some consignment parts and colored parts issues. If you have any dispute for the parts listed in your Portal, please contact the Ford RSMS Helpdesk For Service parts, suppliers need to access:
https://fim.covisint.com/ap/ford?TARGET=https://web.purinfo.ford.com/

For the parts that are not in the GMM Supplier Portal list, suppliers do not need to report in IMDS unless they are required specifically by Program or Purchasing STA for PPAP purpose. Suppliers' annual RSMS certifications will ensure that these unreported parts comply with RSMS. The RSMS certification can be done in IMDS either at Parent level (for all the parts from your whole company) or at the site level (for the parts supplied by your site only).

- When a data sheet is proposed to Ford Motor Company in IMDS you will need to select the appropriate brand as the recipient i.e. – Ford (including Lincoln). Suppliers can use their 4-digit GSDB parent code to report for the whole company or use their 5-digit GSDB site code for their site level reporting when submitting data. If suppliers are unaware of their GSDB code, they should contact their finance person. However, suppliers reporting for site level information will also require their 4-digit GSDB parent code for validation purposes.

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- For assemblies with components as service parts, suppliers should report the components (service parts) first into IMDS with their engineering part numbers; subsequently, suppliers can report the end-item assembly with its engineering part number, and reference the subcomponents (service parts) that they have already reported into IMDS.

- Input the Ford Motor Company Material Specification Numbers (if you use Ford specifications) and Toxicology numbers (for any non-dimensional chemicals included in your hard parts, e.g., fluids, greases, etc., that have been cleared by the Ford Toxicology Office and Environmental Quality Office) in the IMDS reporting screens. If you are using industrial standards or your own standards, input the standard's information in the IMDS reporting screens.

- For bailment/consignment parts, the bailor suppliers are responsible to submit IMDS data to the bailment supplier (bailee). If the bailor has Ford end item part numbers, they are required to send the IMDS to **both** the bailment supplier and Ford Motor Company using the "propose" function in IMDS.

- For a tier 1 assembly part that has Ford direct buy components supplied by other suppliers, the tier 1 supplier need to facilitate to have the components reported to tier 1 supplier and to Ford if the components have Ford end-item part numbers.

1.12 Internal Communication Requirements within Tier 1 Supplier Company

Please cascade this document package to the department heads pertinent to your organization. Departments may include but are not limited to:

- Product Development
- Health, Safety and Toxicology
- Manufacturing
- Information Technology
- Purchasing
- Quality Manager
- Materials Engineering
- Sales
- Environmental/ Regulation
- Ford Account Manager/Business Unit

Both Corporate level and manufacturing site level reporting and certification are allowed. By certifying, the supplier is taking the responsibility that their parts / materials comply with the latest issue of the RSMS.

1.13 Guidelines Concerning the IMDS Datasheet – Summary Table

Field	Requirement	Comment
Chapter 1 **Description**	• Part names	
Chapter 2 **Material Name**	• Polymer material to ISO 1043 • Should be descriptive and not generic, e.g. "Spring Steel Wire A DIN 17223" not "Steel"	
Chapter 3 **Trade Name**	Insert Trade Name here	When applicable
Material No.	The number that specifically identifies the material within the Norm. (e.g. 301S26 a grade of Stainless Steel defined in BS 2056, 1.5510 a grade of Steel defined in DIN 1654-4).	
Symbol	Following ISO 1043/ISO 1629 requirements to enter the appropriate symbols	Must be inserted for polymeric parts
Chapter 4 **Classification**	e.g. steels / thermoplastics	Must be filled in
Norms / Standards	Industry Norms may be added here	
In-house Norms	OEMs in-house Norms and standards may be referenced here, Ford Toxicology numbers, Ford spec numbers may be entered here.	

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Field	Requirement	Comment
Supplier	Material supplier	
Declarable/Prohibited Substances	All GADSL listed substances and RSMS Attachment 2 substances must be reported in Basic Substances field. The supplier must know the reason the substance is used. When sending the material description to Ford, IMDS will require the selection of an APPLICATION ID for some substance on the GADSL.	For PVC (material), chloroethylene polymer is the basic substance. See Ford Frequently Asked Questions for Application ID.
Jokers = Substance Wildcards	*Jokers* (e.g. "Misc.") must not be used to fill up a material to 100% substance disclosure. They must not be used to hide substances listed in the GADSL or RSMS Attachment 2. In cases where there is no other substance reporting opportunity a *Joker* can be accepted in amounts < 5% of the material composition.	A Joker is a pseudo substance in IMDS that has no substance information attached to it.
Flat Bill of Materials = Parts List (see Frequently Asked Questions)	Still require material content of major constituents (e.g. housings / polymer coated wires / circuit board material)	
Recyclate Information Previously called "Security/Environment" (Chapter 2 in IMDS)	Questions 1-4 concern the recycled content of the part and are mandatory. Questions 1-4 ask for the content of recycled material in the part, **NOT** the recyclability of the part. 1. Amount of contained recyclate as released? What is stated on the drawing or the documentation of the part? 2. Amount of contained recyclate as measured? What is the actual content of recycled material in the part? 3. Amount of contained recyclate – post-industrial recyclate? How much of the recycled content is from postindustrial waste (per part weight). 4. Amount of contained recyclate - post consumer recyclate? How much of the recycled content is from post-consumer waste (per part weight)	
Part Number	The Ford End-Item part numbers. All prefix, base and suffix should be entered, " * " and "wildcards" are not allowed. Input "-" in between prefix, base and suffix. For service parts, please enter the engineering part number as follows: • For all **non-WERS** origin-engineering parts, input with the engineering part number packed without delimiters or spaces (e.g., EA0332603D or E9WB17K831BAZJAE). For all **WERS** origin-engineering parts, use the delimited prefix, base and suffix separated with hyphens (i.e., 6 character prefix-8 character base-8 character suffix) (e.g., 1F53-3K183-BA or -E800878-S201).	Must be entered as in the GMMGMM Supplier Portal part list. If the **non-WERS** origin engineering part number contains special characters (i.e., "-" or ".", etc.), enter them in their appropriate location within the packed number.

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Field	Requirement	Comment
Measured Weight ***Calculated Weight***	The actual weight of the component, as measured by the supplier. The total weight of the material under the component	Must be inserted Must equal the Measured weight within the specified tolerance.
Parts Marking	Polymeric or elastomeric parts (assembly components) shall be marked according to applicable standards (e.g. ISO 1043, ISO 1629, ISO 18064, ISO 11469). Your answer is mandatory if the component contains - more than 100 g of polymeric materials of the classification **5.x** (exception 5.2 and 5.3) or - more than 200 g of polymeric (elastomeric) materials of the classification **5.2 and 5.3**. An update of existing IMDS data is required if there are changes in polymeric / elastomeric parts marking.	For reference see the *Ford E-3 Drafting* Standard: MATERIAL IDENTIFICATION & MATERIAL CODE PARTS MARKING

1.14 "Conflict Minerals"

On August 22, 2012, the U.S. Securities and Exchange Commission (SEC) adopted final rules to implement the reporting and disclosure requirements concerning certain minerals. The term “conflict minerals” means:

(i) Gold as well as columbite-tantalite (coltan), cassiterite, wolframite, or their derivatives, which are limited to tantalum, tin, and tungsten; and

(ii) Any other mineral or its derivatives determined by the Secretary of State to be financing conflict in the Democratic Republic of the Congo or an adjoining country.

The above minerals are termed conflict minerals regardless of where they are mined, processed, or sold.

These rules require certain manufacturers to file reports with the SEC to disclose whether the products they manufacture or contract to manufacture contain conflict minerals “necessary to the functionality or production” of their products that are contributing to conflict in the Democratic Republic of the Congo or an adjoining country. These requirements were enacted to further the humanitarian goal of ending violent conflict and human rights abuses in the Democratic Republic of the Congo and adjoining countries, which have been partially financed by the exploitation and trade of conflict minerals.

Annual Conflict Minerals Reporting Requirements
To comply with Dodd Frank Section 1502, Ford is required to file an annual Specialized Disclosure report with the SEC regarding its conflict minerals status. For the purpose of conflict minerals reporting, “Ford” means Ford Motor Company (US) and all of its consolidated subsidiaries. Suppliers that provide parts to Ford containing conflict minerals (as defined above) will be required to submit a Conflict Minerals Reporting Template (CMRT) to Ford annually by September 30. Ford Conflict Minerals Reporting Instructions are located on the Conflict Minerals section of the Ford Supplier Portal. Questions regarding conflict minerals reporting can be directed to cmineral@ford.com. Per our Responsible Material Sourcing Policy, suppliers are required to use smelters and refiners that have been validated as conformant to an independent 3rd party responsible mineral sourcing validation program.

EU Conflict Minerals Regulation (EU Regulation 2017/821) came into effect January 1, 2021. The EU Conflict Minerals regulation applies to certain importers of 3TG to ensure these materials are responsibly sourced and define supply chain due diligence obligations related to the procurement of 3TG sourced globally from conflict-affected and high-risk areas. The regulation defines CAHRAs as follows: ‘areas in a state of armed conflict or fragile post-conflict as well as areas witnessing weak or non-existent governance and security, such as failed states, and widespread and systematic violations of in-

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ternational law, including human rights abuses.' The European Commission has provided an indicative, non-exhaustive list of CAHRAs under the EU regulation. 'Downstream' users of 3TGs (i.e. manufacturers that do not import 3TG) are not subject to mandatory due diligence obligations. While Ford is considered a downstream firm, we will conduct due diligence and voluntarily submit our report.

Cobalt
The Democratic Republic of the Congo (DRC) is the world's largest producer of cobalt and holds more than 50 percent of the global cobalt reserves. There are serious concerns that cobalt sourced from Conflict-Affected or High-Risk Areas (CAHRAs) contributes to severe human rights violations, including worst forms of child labor. Although Cobalt is not included in the Conflict Minerals regulations defined above, customers and investors are demanding that cobalt materials in manufactured products be responsibly sourced. Cobalt supply chain visibility and mapping are important steps towards identifying the refiners that process cobalt for the parts manufactured for Ford.

Annual Cobalt Reporting Requirements
Suppliers that provide parts to Ford containing cobalt are required to submit an Extended Minerals Reporting Template (EMRT) to Ford annually by September 30. Questions regarding cobalt reporting can be directed to cmineral@ford.com.
Per our Responsible Material Sourcing policy, suppliers are required to use smelters and refiners that have been validated as conformant to an independent 3rd party responsible mineral sourcing validation program.

1.15 IMDS and CAMDS Help Desk Contacts

IMDS **American** Service Center supporting **English** language
Monday through Friday, 8 a.m. to 5 p.m. (CST)
NEW phone: (+1) 844 650 4217 / NEW email: imds-helpdesk-english@dxc.com

IMDS **European** Service Center supporting **English** language
Monday through Friday, 8 a.m. to 4.30 p.m. (GMT+1)
phone: (+36) 1 778 9821 / NEW email: imds-helpdesk-english@dxc.com

IMDS **European** Service Center supporting **French and German** language
Monday through Friday, 8 a.m. to 4.30 p.m. (GMT+1)
phone: (+33) 1 57 32 4856 or (+36) 1 778 9821 / NEW email: imds-helpdesk-emea@dxc.com

IMDS **European** Service Center supporting **Portuguese language for emails *NEW**
email: imds-helpdesk-emea@dxc.com

IMDS **Japanese** Service Center supporting **Japanese and English** language
Monday through Friday, 9 a.m. to 5.00 p.m. JST (GMT+9)
phone: (+81) 3 4530 9270 / NEW email: jpimds-helpdesk@dxc.com

IMDS **Korean** Service Center supporting **Korean** language
Monday through Friday, 9 a.m. to 5.00 p.m. Seoul (GMT+9)
phone: (+82) 2 2199 0203 ~ 4 / NEW email: imdsk-helpdesk@dxc.com

IMDS **Chinese** Service Center supporting **Chinese** language
Monday through Friday, 9:30 a.m. to 12:30 p.m., 1:30 p.m. to 5:00 p.m. BST (GMT+8)
phone: (+86) 27 87431668 / NEW mail: IMDS-EDS-Helpdesk-China@dxc.com

CAMDS Service Center (Chinese Language Only)
Monday through Friday, 8:30 a.m. to 12:00 a.m., 13:30 p.m. to 17:00 p.m. (GMT+8)
Phone: (+86) 010-67832387 / 022-84379760 / email: service@camds.org

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2 Procedure - Post-Production Materials

2.1 Data Submission

Service part information is required to be reported individually, per their assigned Ford Engineering number. The majority of service parts are common with production parts; however, service level details may require additional part reporting information. For production end item assemblies, the service component parts that make up that assembly **MUST** also be reported by their respective engineering numbers, in accordance with Sect. 4.0 of this Specification. Ford Customer Service Division (FCSD) will require RSMS certification of all service parts and components prior to distribution of these parts.

Spare parts for servicing vehicles put on the market ***prior to*** 1 July 2003 containing Lead, Mercury, Cadmium and Hexavalent Chromium are exempted from complying with the material restrictions and reporting requirements **except for wheel balance weights, carbon brushes for electric motors, brake linings and convenience light switches**, which are still required to be reported and compliant (see Attachment 2 for countries outside North America and Japan not following EU ELV directive). Reporting requirements for spare parts, remanufactured and re-used service parts still apply if required by local or governmental law (e.g. European Union REACH Regulation).

> **For further reporting requirements please refer to the section "Substance and Materials Reporting and Compliance" in the Ford Global Terms and Conditions (GTC). Ford GTC can be found at: https://web.fsp.ford.com/gtc/index.jsp (this link requires access to the Ford Supplier Portal through Covisint).**

Spare parts for servicing vehicles put on the market ***after*** 1 July 2003 containing Lead, Mercury, Cadmium and Hexavalent Chromium have to follow the same rules as production parts (Attachment 2 of this standard), **except, for the following spare parts where higher thresholds are allowed**:

- Aluminium for machining purposes with a lead content up to 2% by weight for vehicles put on the market before 1 July 2005
- Aluminium for machining purposes with a lead content up to 1.5% by weight for vehicles put on the market before 1 July 2008
- Lead in bearing shells and bushes for vehicles put on the market before 1 July 2008
- Lead in bearing shells and bushes in engines, transmissions and air conditioning compressors for vehicles put on the market before 1 July 2012
- Lead in solder for electronic circuit boards and other electrical applications for vehicles type approved before 31 December 2016
- Lead in pyrotechnic initiators for vehicles type-approved before 1 July 2006
- Lead in vulcanizing agents and stabilizers for elastomers in brake hoses, fuel hoses, air ventilation hoses, elastomer/metal parts in the chassis applications, and engine mountings for vehicles put on the market before 1 July 2005
- Vulcanising agents and stabilisers for elastomers in brake hoses, fuel hoses, air ventilation hoses, elastomer/metal parts in the chassis applications, and engine mountings containing up to 0.5% lead by weight for vehicles put on the market before 1 July 2006
- Lead in valve seats for engine types developed before 1 July 2003
- Hexavalent Chromium in corrosion preventive coatings for vehicles put on the market before 1 July 2007
- Mercury in discharge lamps for headlight applications and fluorescent tubes used in instrument panel displays for vehicles type approved before July 2012

These above-mentioned spare parts are allowed for servicing of vehicles with parts containing lead or Hexavalent Chromium at the same level as **allowed** per RSMS requirements during the production of these vehicles.

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3 Procedure – Non-Dimensional Materials and Hazardous Articles

3.1 Data Submission

Global Material Approval (GMA) is a single, web-based tracking tool that is used by suppliers to submit non-dimensional material compositions, associated regulatory data, hazardous materials / dangerous goods transportation information, and applicable GHS, SDSs, or MSDSs (in the required languages, designated by the requester of the product and indicated with an asterisk) to Ford Motor Company. The Global Material Approval (GMA) system also allows suppliers to check the status of material requests and update materials information. https://fim.covisint.com/ap/ford?TARGET=https://www.gma.ford.com/

Any GMA releasing process is initiated by the activity intending to use a new material which is not yet released for its usage in a Ford facility. Also, materials being released for a certain application in a certain working environment must be re-reviewed using GMA in an abbreviated process.

The GMA process implements the Ford Automotive Operations Procedure FAP03-132. The document defines methods and functions to maintain Material Specifications, select and approve materials for Ford products, and perform OHS and environmental reviews. The GMA system gives Ford employees the opportunity to participate in the material approval process. They can search for approved materials and specifications for new materials, submit requests for new materials and respond to acceptance and rejection of their requests. Authorized users can also review requests, accept or reject them and update material information.

There are three types of materials in GMA:

- **Production materials** A dimensional or non-dimensional material which becomes part of a product marketed by Ford.
- **Post-production materials** A dimensional or non-dimensional material that is used to service a vehicle after it exits the assembly plant.
- **Non-production materials** do not become part of the product. There are two types of non-production materials: critical non-production and non-critical non-production. Critical non-production materials affect or may affect the product. Non-critical non-production materials do not affect the product (i.e., floor cleaner at an assembly plant).

Once a request is submitted through GMA, it goes through a global material approval process called a review. Reviews accommodate both regional and local requirements and the process itself varies, dependent on the type of material being reviewed (production, non-production or post-production). Requesters may re-submit a request for approval of a material that has already been approved or rejected, which is called a re-review.

For regulatory compliance proposes, throughout the year, materials that were formerly approved in the MATS/GMAP system or GMA system, may be rejected by FORD. For this reason, prior to shipping any product to any FORD location, Suppliers shall ensure that products continue to have existing FORD approval specific to the country and FORD location of use (referred to in FAP03-132 as Comprehensive Material Clearance). Existing approval confirmation can be determined via the GMA system https://fim.covisint.com/ap/ford?TARGET=https://www.gma.ford.com/, and by contacting the requestor of the material.

There are two types of GMA users: requesters and approvers. Requesters use the system to search for approved materials or to submit requests for the approval of new materials. Approvers are authorized to review requests at defined points throughout the evaluation process. Security is controlled in GMA through the web single login, which only allows users with a valid CDSID to log into the system (internal access) and through screen access control. GMA administrators set up approvers and facilities in the system. Approvers are controlled by the approval activity that they are assigned to in the system.

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CHEMICAL DISCLOSURES: Ford Motor Company requires disclosure of the Confidential Statement of Formula (CSF) of all substances within all non-dimensional materials and hazardous articles to a level of ≥ 0.1 % w/w in order to meet Health, Environmental regulatory and internal requirements, unless specified at a lower mass percent in the Restricted Substances Standard and List (RSMS & RSL resp.) or in the requirements for Toxicology evaluation and the approval of materials, as mentioned in Section 3 - Requirements of this Standard.

HANDLING OF CHEMICAL RANGES: Use exact component percentages where possible. Where ranges are necessary, they should be no broader than 10% (e.g. 0-10%, 5-15%, 20-30%). Composition will either total exactly 100%, or the sum of the minimum ranges must be less than 100% but no less than 85%, and the sum of the maximum ranges must be greater than 100% but no more than 115%. Where ranges are given, they must reflect true possible values, and must be justifiable (e.g. cases of feedstock/supply-base variability) upon request.

Classification and labeling of materials will be based on the upper level of the ranges stated for each component. Confidential formulation data submitted through the supplier portal will be held under the FORD Global Terms and Conditions (GTC).

SAFETY DATA SHEETS:
North America Production Materials: Suppliers are now required to submit all three North American country languages GHS SDS (NOM STPS Spanish, OSHA English, WHMIS English and WHMIS French) with each GMA data submission.

Most countries have moved to the new Globally Harmonized System of Classification and Labeling of Chemicals (GHS). Regional implementation Timing of GHS can be found at: http://www.unece.org/trans/danger/publi/ghs/ghs_welcome_e.html. Suppliers are required to submit GHS compliant Safety Data Sheets following the applicable requirements.

4 Frequently Asked Questions

4.1 GMM Supplier Portal

1. Outdated or obsolete part numbers are displaying on the GMM Supplier Portal for my company. How can I resolve these issues *(who within the program team can help to research and confirm these supplier claims)*?
A: Contact your program team Design and Release engineers or the Ford Account manager to update the parts in WERS release systems, then the new Bills of Materials (BOM) will be updated, thus your GMM portal part list will also be updated accordingly.

2. Parts that do not belong to my company or site are displaying on the Parent Level/Site Level Metrics screen in the GMM Supplier Portal. How can I remove these parts from my list?
A: These parts are assigned to you in our Purchasing Database System. Please contact your Ford Buyer to correct the part sourcing listed in the Purchasing systems.

3. My part has been "Rejected" – what does this mean and what should I do?
A: This means that your parts are used in our vehicle calculations, but have significant errors in them that must be corrected. Please see questions 4 and 5 also.

4. Why did my part get rejected? I have researched the part ingredients screen in IMDS and cannot identify the substance of concern that is causing this issue.
A: This rejection means that your part conflicts with the RSMS standard and could be illegal! Please investigate immediately. Please make sure you selected the right "Application Code" for the substance and check that the amounts of your substances in the material / part do not exceed the violation threshold. Please study RSMS Attachment 2 in order to understand the applications for each substance.

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5. Why doesn't my part submission match to a BOM? What does not matched to BOM mean? Is it possible that I submitted the wrong part number? Is further action required by my company to fix these part submissions? My supplier report card shows that most of my part submissions are unmatched to a BOM, how should I resolve this issue?
A: This can be for several reasons – your parts are service parts, your parts are in a previous model year BOM, you are not the Tier 1 supplier for these parts. In order to improve the matching, we ask every supplier to use GMM Supplier Portal to check which parts should be reported. If you reported parts that are not in the GMM Portal, you will most probably get an un-matched parts issue. You should report whatever parts are in the GMM Supplier Portal, and certify all the remaining parts supplied by your company meet the requirements of the RSMS. For Service parts please see the FAQ #21.

6. I have researched my parent level/site level metrics on the GMM Supplier Portal and have found some inconsistencies regarding part status. I have reported some of the parts in IMDS, but I am not given credit on the portal.
A: Please ensure that your data was sent to the correct company (e.g. Ford Motor Company Dearborn - IMDS Company ID 102), using the correct GSDB code. The GMM Supplier Portal is refreshed every 2 weeks, to match parts reported to BOMs. If you did send the data correctly, please wait 2 weeks to enable the supplier portal data to be refreshed.

7. What do the # signs listed as site codes in the GMM Supplier Portal represent? How can I fix this issue?
A: When we receive a datasheet, we attempt to match the part number and supplier code to Ford's Purchasing system in order to validate that the part is sourced to the parent supplier code it was submitted under, and to find the supplier site level codes. If a match cannot be found, the site code is defaulted to #####. Please contact your Ford Buyer to update your data in the Ford Purchasing system.

8. In the GMM Supplier Portal, my part number is mapped to the wrong site code. How can I resolve this issue?
A: See FAQ answers for #1, # 5 and #6.

9. How do I obtain access to the GMM Supplier Portal? Who is my company's Corporate Security Administrator?
A: Please review the information available on the FSP using the following links: "How to Request an Application" and "CSA Lookup" at https://fim.covisint.com/ap/ford?TARGET=https://fsp.covisint.com.

10. What are the criteria for me to update previously reported parts in IMDS?
A: Please see the clauses under 1.8 **Reporting IMDS datasheets**

11. Can you explain the RSMS certification process in IMDS and GMA? If I have submitted a certification for my parts, do I still need to provide individual part data?
A: By certifying to RSMS, suppliers are giving an assurance that their parts / materials are in compliance with the substance prohibitions in this version of the Ford Restricted Substance Management Standard (WSS-M99P9999-A1). Every production and service part that is shown in the GMM Supplier Portal and will be going thru PPAP/PSW has to be reported in IMDS.

For the parts which are not in the GMM Supplier Portal/Service Part List, and parts which need not to be reported in IMDS, your RSMS Certification will ensure they are in compliance with the substance prohibitions in this version of the RSMS.

You still need to submit the individual part data if the part number is listed in the GMM Supplier Portal, even you submitted the certification.
For non-dimensional production materials, suppliers need to certify chemical composition is complete and accurate for every data submission.
https://fim.covisint.com/ap/ford?TARGET=https://www.gma.ford.com/

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4.2 General Questions

12. How should I obtain the necessary data from my sub-suppliers? My sub-suppliers will not comply with my requests for data?
A: You must cascade the same requirements, e.g., RSMS to your sub-suppliers and let them understand this is required by laws/customers. Appropriate measures must be taken if they cannot comply, since this will put you and Ford in non-compliant position. If you are unable to resolve the issue, contact your STA Engineer and/or buyer for further assistance.

13. I don't understand what I need to do in order to meet Ford requirements? Where can I find the Ford documentation?
A: Ford has always published Ford's requirements/guidelines in IMDS Public page. You can check details in IMDS Website https://public.mdsystem.com, Help, OEM Specific Info, Ford Motor Company, to check RSMS package and other information released by Ford.

14. Who should complete certification for my company? Am I the appropriate person to complete this task?
A: The authorized personnel from your site or corporate office that understands Ford's requirements and understands your company compliance status should certify on behalf of your site or the whole company in IMDS.

15. How do I obtain the necessary information on consignment parts that I ship to Ford?
A: Contact your Ford buyer to confirm your contractual responsibilities. However, if the sub-tier suppliers have Ford end-item part numbers for the parts, you should advise them to send the parts information to you and to Ford using "Propose" function in IMDS. In cases where it is Ford's responsibility to provide data, please contact Ford personnel in each brand/region listed in the Ford Reporting Guidelines to get advice.

16. Who receives the notification email from Ford when a part is rejected? How can I change that contact person or add myself as a contact?
A: Whoever submitted the data sheet in IMDS will get the emails. You cannot change that contact person once the data sheets are sent out. If you want to receive notifications, you have to send the data under your contact information.

17. What are the non-dimensional material reporting process/requirements?
A: Suppliers must report non-dimensional production and non-production materials and hazardous articles (e.g., dry friction pad) through the GMA process. All non-dimensional production and non-production material suppliers must certify compliance to RSMS in GMA with every data submission. https://fim.covisint.com/ap/ford?TARGET=https://fsp.covisint.com.

18. If I am a manufacturer, and I send my materials to a distributor, and I don't have a Ford GSDB code, what can I do?
A: Suppliers as distributors must cascade the RSMS requirements to your manufacturers and facilitate the manufacturers to comply with RSMS. Manufacturers, who produce MSDS for the production materials supplied to Ford, must certify your compliance to RSMS in GMA with every data submission. Manufacturers can apply for a special Ford GSDB code so that you can enter the Ford GMA process.

19. What are the substance application codes and its associated process?
A: Application codes are a way for the supplier to tell Ford whether a particular substance in Ford's RSMS is used in a legal or prohibited application. For some substances in the RSMS, Ford requires an appropriate application code.

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20. How can I know which service parts Ford wants us to report for North America?
A: To find updated service parts lists, please visit https://web.purinfo.ford.com/ (follow the Purchase Order Information link). If you have trouble obtaining access to the FCSD site, please contact Carly Demek at CDemek@ford.com

21. I have a part including a substance listed in RSMS Attachment 2, which is not a Global Automotive Declarable Substance List (GADSL) substance. Do I have to report in IMDS?
A: Yes, you have to report, provided the Attachment 2 listed substance is referenced to a product or an application. – With respect to hard parts' IMDS reporting Ford's RSMS Attachment 2 is the same as the GADSL. However, RSMS does also control substances included in non-production (process) materials which are beyond the GADSL listed substances. Ford recommends that for substance reporting suppliers follow the IMDS Recommendations (minimum requirement) and will accept data sheets created by following Recommendation 001.

22. If I add an in-process substance that converts to a GADSL/RSMS Attachment 2 substance in the manufacturing process, is this considered "unintentionally added"?
A: No. It is considered intentionally added and must be reported or eliminated.

23. How far back do I need to report past model service parts-are parts prior to 2003 MY excluded?
A: Past Model Service Parts are those parts no longer used in production but still produced for service.

Exemption status and reporting requirements for Service parts for vehicles built before and after 1 July 2003 are specifically addressed in Sect 2.0 of RSMS Reporting Requirements.

Because of pending and potential substance restriction regulatory legislation (i.e. asbestos, mercury, etc.), FCSD will require IMDS RSMS certification for all (Even ELV Exempted 2003MY and prior) past model parts, but 100% material and GADSL/RSMS Attachment 2 substance reporting in IMDS is not required, unless the vehicle application is 2004MY or later.

Reporting requirements still apply for all parts if required by local or governmental law (e.g. European Union REACH Regulation). **For further reporting requirements please refer to the section "Substance and Materials Reporting and Compliance" in the Ford Global Terms and Conditions (GTC).**

Based on the above direction suppliers who submit IMDS data for past model service part vehicles built after 1 July 2003 (2004MY) may get a rejection notice, which they will just have to ignore for now. Not until a final EU ELV ruling on service parts is issued, will Ford add the part and model year application intelligence in GMM to allow ELV/RSMS Heavy metals in past model parts.

All parts must be in compliance with the current years RSMS with some exceptions (FCSD Service Parts-Section 4.4). Modification of parts to remove the RSMS substances of concern will be decided on case by case basis, as directed by Ford Engineering. Suppliers are not authorized to modify parts to remove RSMS substances without Ford Approval, and documenting the change via WERS or the Supplier Request for Engineering Approval (SREA) process.

24. Where do I get an Asia Pacific Program parts list on the GMM Supplier Portal?
A: Select the Region—Asia Pacific, then you can see the Programs listed. In case you have any question, please contact Janet Yin at wyin4@ford.com.

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25. Why does the information in the "Supplier's Part Number" column differ from that in the "Ford Part Number" column on the Site Level Metrics screen?
A: The supplier's part number may fuzzy match to the Ford Part Number. The Ford fuzzy match algorithm will match part submissions to the first character of the part suffix, with the exception of colored parts and parts that do not have a prefix. Colored parts are defined as either containing a "W" as the third or fourth character of the suffix or when the suffix is greater than four characters in length. Please note that if there are multiple matches for the same Brand/Part Number/Parent GSDB/Site GSDB, the latest submission received by GMM will be retrieved and may not necessarily be the highest suffix match.

26. How do I furnish proof for the Production Part Approval Process (PPAP) submission?
A: Suppliers should use the GMM Supplier Portal Total Parts Submitted via IMDS report to furnish proof of RSMS compliance for PPAP. In order to access the GMM Supplier Portal Manual, users must log into the GMM Supplier Portal application and click the "Help" button that is located in the header.

27. Are there any special GMM report printing instructions for the Production Part Approval Process (PPAP)?
A: When printing the GMM Supplier Portal Total Parts Submitted via IMDS report for the PPAP submission package, make sure to repeat the header information of the report (i.e., top 6 rows of the report) when there are multiple pages in the worksheet. This will allow you to include in the PPAP submission packet, only the page of the report containing the relevant part submission information. Refer to the File/Page Setup menu options (Sheet tab) in Microsoft Excel to designate the rows to repeat at the top of the spreadsheet.

28. I do not understand the Conflict Mineral Requirements?
A. Please send questions to cmineral@ford.com

29. Are the RSMS requirements included in a Global Terms and Conditions Web Guide?
A: Yes, please refer to https://web.fsp.ford.com/gtc/docs/envguide.pdf

30. Where do I find country specific supplements to the Global Terms and Conditions?
A. Refer to the following website for country specific supplements:
https://web.fsp.ford.com/gtc/production/index.jsp?category=supplements.

31. I am a dimensional supplier, if all substances are required to be declared at 0.1% or lower how do keep my proprietary (i.e. trade secret) material composition information hidden in my IMDS datasheets?
A. Only specific substances listed in Attachment 2 and GADSL cannot be hidden. For all other substances up to 5 % can be hidden by either blinding out the confidential information or by using wild cards like “Misc.”.

32. Is CAMDS reporting required for all China produced vehicle programs?
A: For new vehicle programs produced in China starting from MY19, suppliers are required to directly report in CAMDS. For ongoing production vehicle programs produced in China, suppliers will be required to report in CAMDS as requested by CAF/JMC to support vehicle homologation activity, suppliers can choose either do CAMDS reporting themselves or Ford will do the data transfer as mentioned in CAMDS reporting and data transfer requirement section.

33. Where can I get training for CAMDS reporting?
A: If you have any issues regarding CAMDS reporting or want CAMDS reporting training, please contact Wang Yifei (YWANG109@FORD.COM) for CAF parts OR Yang Jiali (JYANG17@JMC.COM.CN) for JMC parts.

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34. How can I get a CAMDS account to do the CAMDS reporting?
A: Please contact Wang Yifei (YWANG109@FORD.COM) for CAF parts OR Yang Jiali (JYANG17@JMC.COM.CN) for JMC parts to create CAMDS account ID for your company.

35. How do I meet the coming Management and Implementation Rules for the Automobile Hazardous Substances and Recyclable Utilization Rate Consistency in China?
A: There will be high risk parts lists (approximate 54 parts) which are targeted for spot check to be declared later with the publishing of Management and Implementation Rules for the Automobile Hazardous Substances and Recyclable Utilization Rate Consistency. Suppliers are required to conduct tests on these high-risk parts for prohibited substances specified in China GB/T 30512-2014 as demanded by CAF & JMC. Refer to China GB/T 30512-2014 for test methods. The test report must be delivered before the GPDS <PEC> (for powertrain is gateway <Unit TD>) gateway or 8 months before vehicle (powertrain) <MP1> (Job 1), whichever comes first.

36. What is required to meet the new S. Korea "Guideline for verification of compliance with the restrictions on the concentration of hazardous substance in the Electrical and Electronic Equipment and Motor Vehicles - MOE Notification 613 (2017.10.20)"?
A. When Ford receives a request for data for specific parts the supplier is required to provide physical test data as specified in the South Korean MOE Notification No. 613.

37. How should I report parts with color variations/suffixes?
A. Colored parts are defined as either containing a "W" as the third or fourth character of the suffix or when the suffix is greater than four characters in length. Ford strongly recommends that suppliers report all colored suffixes listed in the GMM supplier portal metrics in IMDS. However, if this is not possible the supplier may report to the abbreviated "W" (in-white) suffix level, this is a generic suffix level that will cover reporting for all colors due to Ford Fuzzy Matching logic. Please be aware that if a supplier chooses to report to the "W" suffix level it is their responsibility include the substance composition of one of the colors in the IMDS report and the color reported must be the worst-case scenario from a substance compliance standpoint.

38. What should I do if my part number is not available to report to in IMDS?
A. We recommend using the "search" function to find your part numbers, on the recipient tab in IMDS. Please use capital letters in the search box. If your part still is not available, please reach out to your D&R engineer to have the part released in Ford's internal WERS system.

39. Where can I find guidance for reporting in IMDS, and what are the data quality recommendations?
A. IMDS online has several resources to help for reporting. The IMDS Frequently Asked Questions can be found at https://public.mdsystem.com/en/web/imds-public-pages/faq, and the user manual is found at https://public.mdsystem.com/documents/10906/16811/imds_usermanual_13.1_en.pdf. Recommendations can be found after logging in to the system under the "help" menu.

40. Where can I find my GSDB parent code?
A. If you don't know your parent/site code, you can obtain it from your Ford Buyer. Ford's GMM users can find your parent code at the top of your "parent supplier report card" located on the GMM Supplier Portal, which can be found on the Environmental Link of the Applications tab in Covisint.

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2022 RSMS
Helpful Information and
Substances Being Considered for Prohibition

Note on the Deactivation of IMDS REC019:

Due to deactivation of REC019 by IMDS release 13 FORD will no longer automatically accept datasheets using references to ZVEI semi-finished components.

Suppliers of new datasheets will be asked to review and update their electronic components if appropriate. Suppliers of already accepted datasheets might be asked to update their data. FORD will try to avoid unnecessary workload by setting priorities with regards to vehicle lines and regions.

The IMDS SC has published an FAQ with regards to REC019:
https://public.mdsystem.com/en/web/imds-public-pages/faq/-/asset_publisher/AuVyF7A3kM3i/content/e-e-components-recommendation-imds019

The substances and regulations listed below are some that are currently being considered for restrictions based on recent regulatory inquiry and assessments.

Background
The substances selected by Ford are found on the following government lists:

- U.S. EPA Toxic Substances Control Act (TSCA) Work Plan Chemicals (http://www.epa.gov/assessing-and-managing-chemicals-under-tsca/tsca-work-plan-chemicals)
- REACH Substance of Very High Concern List (http://echa.europa.eu/web/guest/candidate-list-table https://echa.europa.eu/registry-of-restriction-intentions https://echa.europa.eu/registry-of-svhc-intentions)
- Canada's Chemical Management Plan – Certain Organic Flame Retardants (https://www.canada.ca/en/health-canada/services/chemical-substances/substance-groupings-initiative/certain-organic-flame-retardants-substance-grouping.html)

Substances Being Considered for Future Restriction in Vehicle Hard Parts and Process Chemicals

PFAS Restrictions
Several jurisdictions have passed laws or are considering regulations to prohibit the use of certain PFAS in the future. In the EU, 5 countries have petitioned the EU regulator to prohibit the use of almost all PFAS in products, starting as early as 2025 CY. The United States state of Maine has already passed a law to prohibit the use of intentionally added PFAS in products, starting in 2030 CY. Products containing intentionally added PFAS could only be sold in Maine after 2029 CY with an approved unavoidable use exemption. An additional attachment has been added to the IMDS OEM Specific Info pages (https://public.mdsystem.com/en/web/imds-public-pages/oem-specific-info) to identify a non-exhaustive list of potential PFAS Substances.

DP/DBDPE Restriction
The Canadian regulators have proposed to prohibit the use and import of the flame retardants DP and DBDPE, as early as mid-2023 CY. As currently proposed, no exemptions would be allowed for any use of DP and DBDPE.

TSCA Reform- Chemicals Undergoing Review (affects dimensional and non-dimensional products)
US EPA performs chemical risk evaluations under the Toxic Substances Control Act (TSCA). A number of high-priority and Persistent, Bioaccumulative and Toxic (PBT) chemicals are being reviewed and we anticipate future restrictions or prohibitions. The fast-tracked PBTs below were subject to a final rule in Q1 2021, however EPA is considering reviewing and possibly revising all five rules in the next two years.

Global restrictions will continue to be communicated in future versions of the Ford RSMS. However, we recommend that our suppliers understand these potential updates and identify whether a voluntary phase out of these substances should be pursued in advance of requirements. Additionally, if suppliers are currently not using these chemicals, we recommend that you do not begin use due to potential regulations.

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TSCA PBTs - Final rules were published in January 2021.

CAS	**Chemical Name** *(RSMS Status)*
1163-19-5	Deca BDE *(Prohibited in all products per Ford's RSMS)*
133-49-3	Pentachlorothio-phenol (PCTP) (used to make rubber more pliable) *(Prohibited in all products in RSMS)*
68937-41-7	Tris (4-isopropylphenyl) phosphate (PIP (3:1)) (flame retardant) *(Prohibited in some products in US per RSMS.)*
732-26-3	2,4,6-Tris(-tert-butyl)phenol (often used as oil/ lubricant additive) *(Prohibited in all products per RSMS.)*
87-68-3	Hexachlorobutadiene (HCBD) *(Prohibited in all products per RSMS)*

TSCA High-Priority Chemicals

Final risk evaluations have been published for the first 10 chemicals and the EPA has found unreasonable risk to workers in a number of applications, however, the EPA is planning to reissue these risk evaluations using a "whole chemical" approach, assuming no PPE and assessing fence-line communities. Risk management actions for some are expected in 2022 and we encourage our suppliers to maintain awareness of these changing evaluations. TSCA High Priority Chemicals can be found here: https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/chemical-substances-undergoing-prioritization-high

CAS#	**Chemical Name** *(RSMS status)*
81-33-4	Perylene-3,4:9,10-tetracarboxydiimide (Pigment Violet 29) *(Declarable in all products per RSMS)*
123-91-1	1,4-Dioxane *(Declarable in all products per RSMS)*
872-50-4	N-Methylpyrrolidone (NMP) *(Prohibited in some EU products per RSMS)*
127-18-4	Perchloroethylene or Tetrachloroethylene (PCE) *(Prohibited in Some Products per Ford's RSMS)*
106-94-5	1-Bromopropane *(Prohibited in all products per RSMS)*
75-09-2	Methylene chloride *(Prohibited in some products per RSMS)*
25637-99-4; 3194-55-6; 3194-57-8	Cyclic Aliphatic Bromide Cluster (HBCD) *(25637-99-4 and 3194-55-6 are prohibited in all products per RSMS;3194-57-8 is Declarable in all products per RSMS)*
79-01-6	Trichloroethylene (TCE) *(Prohibited in all products per RSMS)*
56-23-5	Carbon tetrachloride *(Prohibited in all products per RSMS)*

American Innovation and Manufacturing (AIM) Act – Phasedown of Hydrofluorocarbons (HFCs):

US EPA has issued a final rule to implement the AIM Act, which mandates the phase down of production and consumption of HFCs by 85% below baseline levels by 2036).

CAS#	**Substance**
359-35-3	HFC–134
811-97-2	HFC-134a
430-66-0	HFC-143
460-73-1	HFC-245fa
406-58-6	HFC-365mfc
431-89-0	HFC-227ea
677-56-5	HFC-236cb
431-63-0	HFC-236ea
690-39-1	HFC-236fa
679-86-7	HFC-245ca
138495-42-8	HFC-43-10mee
75-10-5	HFC-32
354-33-6	HFC-125
420-46-2	HFC-143a
593-53-3	HFC-41
624-72-6	HFC-152
75-37-6	HFC-152a
75-46-7	HFC-23

Date	**% of Baseline**
2022-2023	90
2024-2028	60
2029-2033	30
2034-2035	20
2036 and thereafter	15

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REACH Annex XIV "Authorization List":
Please be aware of the list of substances included in Annex XIV of REACH ("Authorization List") and their corresponding sunset dates. These substances will be banned globally by Ford at the given sunset date. Follow this link for details: https://echa.europa.eu/authorisation-list.

Other Substance Being Considered for Future Restriction in Vehicle Components

It is recommended (but not required) that a voluntary phase out of these substances be pursued in vehicle components.

If an assessment associated with the substances indicated a significant risk to human health or the environment, and the substance was likely found in vehicle components, it was selected for the list below.

Substance Name	CAS #
TDCPP	13674-87-8
TCPP	13674-84-5
NMP *(Currently prohibited per Ford's RSMS)*	872-50-4
DP	13560-89-9
DBDPE	84852-53-9

Other Substance Being Considered for Future Restriction in Process Chemicals

Substances subject to the Global Manufacturing Materials Strategy (MMS)
Expanded efforts will be made, over and above the RSMS, to reduce certain substances of concern in non-dimensional high-volume commodities such as:

- Paints & Related, Adhesives & Sealers, and Hydrocarbon Lubricants (Globally)
- Other Chemical Purchases (NA).

Affected suppliers will be contacted to participate in review of material alternatives to support the strategy.

Responsible Sourcing of Materials

Ford seeks continuous improvement in its due diligence and increased transparency related to raw materials from conflict-affected or high-risk areas. Ford may request suppliers to verify the materials in the products supplied to Ford have been sourced responsibly in accordance with Ford's Global Term and Conditions and Supplier Code of Conduct.

Suppliers providing products that contain relevant materials such as conflict minerals, cobalt, mica, rubber, or any other materials that Ford deems appropriate may be requested to participate in specific initiatives or provide various items in support of our responsible sourcing efforts. Ford will communicate such requests directly to affected suppliers. Per our Responsible Material Sourcing policy, suppliers are required to use smelters and refiners that have been validated as conformant to an independent 3rd party responsible mineral sourcing validation program.

Projected European Material Restrictions and Due Diligence Requirements
In 2020, the European Commission proposed a new regulation that would place mandatory requirements related to battery manufacturing, import to the European Union (EU), and end of life management. Relevant requirements that could affect substance restrictions or reporting include provisions for minimum recycled content, performance and durability criteria, and due diligence.

Furthermore, in early 2021, the European Parliament's legal committee adopted a report calling on the EU to legally require companies to protect human rights and the environment in their supply chains. The report outlines mandatory due diligence requirements on environmental and human rights risks for all companies and sectors.

Ford will require suppliers submit relevant information and cascade requests to sub-tiers accordingly to comply with final rules and conduct due diligence in accordance with local laws.

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2022 RSMS

ELV Lead Expiration Dates for Vehicles

Materials and Components	Expiration Date of Exemption ("Ban Date") relates to Vehicle Type approved
Lead as an alloying element: 1(b). Continuously galvanized steel sheet containing up to 0.35% lead by weight	1 January 2016
Lead and lead compounds in components: 6. Vibration dampers	1 January 2016
Lead and lead compounds in components: 8(a). Lead in solders to attach electrical and electronic components to electronic circuit boards and lead in finishes on terminations of components other than electrolyte aluminum capacitors, on component pins and on electronic circuit boards	1 January 2016
Lead and lead compounds in components: 8(h). Lead in solder to attach heat spreaders to the heat sink in power semiconductor assemblies with a chip size of at least 1 cm^2 of projection area and a nominal current density of at least 1 A/mm^2 of silicon chip area	1 January 2016
Lead and lead compounds in components: 8(i). Lead in solders in electrical glazing applications on glass except for soldering in laminated glazing Note: compare with 8(j)	1 January 2016
Lead and lead compounds in components: 10(c). Lead in dielectric ceramic materials of capacitors with a rated voltage of less than 125 V AC or 250 V DC	1 January 2016
Lead and lead compounds in components: 8(f)(a). Lead in compliant pin connector systems Note: split in 8(f)(a) and 8(f)(b) – "mating area". 8(f)(b) expires 1 January 2024 type approval date	1 January 2017
Lead and lead compounds in components: 10(d). Lead in the dielectric ceramic materials of capacitors compensating the temperature-related deviations of sensors in ultrasonic sonar systems	1 January 2017
Lead and lead compounds in components: 12. Lead-containing thermoelectric materials in automotive electrical applications to reduce CO2 emissions by recuperation of exhaust heat	1 January 2019
Lead and lead compounds in components: 5(a). Lead in batteries in high voltage systems (>75 V DC) that are used only for propulsion in M1 and N1 vehicles	1 January 2019
Lead and lead compounds in components: 8(j). Lead in solders for soldering of laminated glazing Notes: (a) compare 8(k), limited scope; (b) compare 8(i), expired by 1 January 2016 type approval date	1 January 2020
Lead and lead compounds in components: 8(g)(i). Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit flip chip packages Note: 8(g) split into 8(g)(i) & 8(g)(ii); 8(g)(ii) with limited scope, review in 2024 8(g)(ii). as 8(g)(i), but electrical connection consists of any of the following: (i) a semiconductor technology node of 90 nm or larger; (ii) a single die of 300 mm2 or larger in any semiconductor technology node; (iii) stacked die packages with dies of 300 mm2 or larger, or silicon interposers of 300 mm2 or larger.	1 October 2022
Lead and lead compounds in components: 8(f)(b). Lead in compliant pin connector systems other than the mating area of vehicle harness connectors. Note: compare with 8(f)(a), expired by 1 January 2017 type approval date	1 January 2024
Lead and lead compounds in components: 8(k). Lead in solders for soldering of laminated glazing, limited scope vs. 8(j): >0.5 A, glass pane max. 2.1 mm. Not applicable for soldering to contacts embedded in intermediate polymer. Notes: (a) compare 8(j), expired by 1 January 2020 type approval date; (b) compare 8(i), expired by 1 January 2016 type approval date	1 January 2024

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2022 RSMS

ELV Hexavalent Chromium Expiration Dates for Vehicles

Materials and Components	**Expiration Date of Exemption ("Ban Date") relates to Vehicle Type approved**
Hexavalent Chromium: 14.(i) Hexavalent chromium as an anti-corrosion agent of the carbon steel cooling system in absorption refrigerators up to 0,75 % w/w in the cooling solution: fully or partly operate with electrical heater, electrical power input < 75W Note a: compare with 14.(ii) & 14.(iii)	1 January 2020
Hexavalent Chromium: 14. Hexavalent chromium as an anti-corrosion agent of the carbon steel cooling system in absorption refrigerators up to 0,75 % w/w in the cooling solution: (ii) fully or partly operate with electrical heater, electrical power input ≥75W (iii) fully operate with non-electrical heater. Note: compare with 14.(i), expired 1 January 2020 type approval date	1 January 2026

In most regions the restriction of ELV substances depends on the date when the vehicle type has been put on the market the first time. Ford now makes the expiration date of the exemption the restriction or ban dates rather than using types approval dates. If you have questions about your components / parts and type approval implications, please contact RSMSHELP@FORD.COM.

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