



RESTRICTED SUBSTANCE MANAGEMENT STANDARD

WSS-M99P9999-A1

1. SCOPE

The purpose of this Standard (RSMS) is to inform suppliers to Ford Motor Company, and Ford personnel, of restrictions pertaining to certain substances. 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 badged, e.g., JMC, ChangAn, Ford Otomotiv Sanayi A.S., Otosan, Blue Diamond, 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 2018 RSMS reporting timing covers 2018 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 GPDS milestone <PEC> for each vehicle, which is approximately 8 months before job 1. Please note that although IMDS is a requirement for approval of PPAP, the due date for completed and approved IMDS is the <PEC> milestone. 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 clearance by Ford Toxicology and the Environmental Quality Office (EQO) in addition to the requirements of this Standard. This clearance must be completed 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
2018 05 23	Revised	2018 Revision K. Keller, NA
2017 04 11	Revised	2017 Revision K. Keller, NA
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 in 3.1.5. The RSMS Attachments 2 and 3 and RSL (Restricted Substance List) will no longer show rows for Declarable substances whose declaration threshold is 0.1 % (weight percent). 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 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 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 Ford Restricted Substances Management Standard and List (Attachments 2 and 3 & RSL, respectively) or in the requirements for Toxicology evaluation and the clearance 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 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).

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 e1291 data submission.

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.



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.**

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

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.

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 GMAP-e1291 approval process, where applicable, at <https://web.emmq.ford.com/e1291/menu/index.htm>)





- 3.1.7 Suppliers shall aim to reduce or replace carcinogenic, mutagenic, reprotoxic or persistent, bioaccumulative and toxic substances in the products they supply to Ford.
- 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>.
- 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 4.5.1 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 GMAP-e1291 (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/12_2_part1_en.pdf

http://www.orau.org/ptp/PTP%20Library/library/International/EuropeanCommission/12_2_part2_en.pdf

- 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 "Forest Law Enforcement, Governance and Trade).
- 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 recycle (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 on the RSL in GMAP-e1291 website (<https://fsp.portal.covisint.com/web/portal/home>). It is the



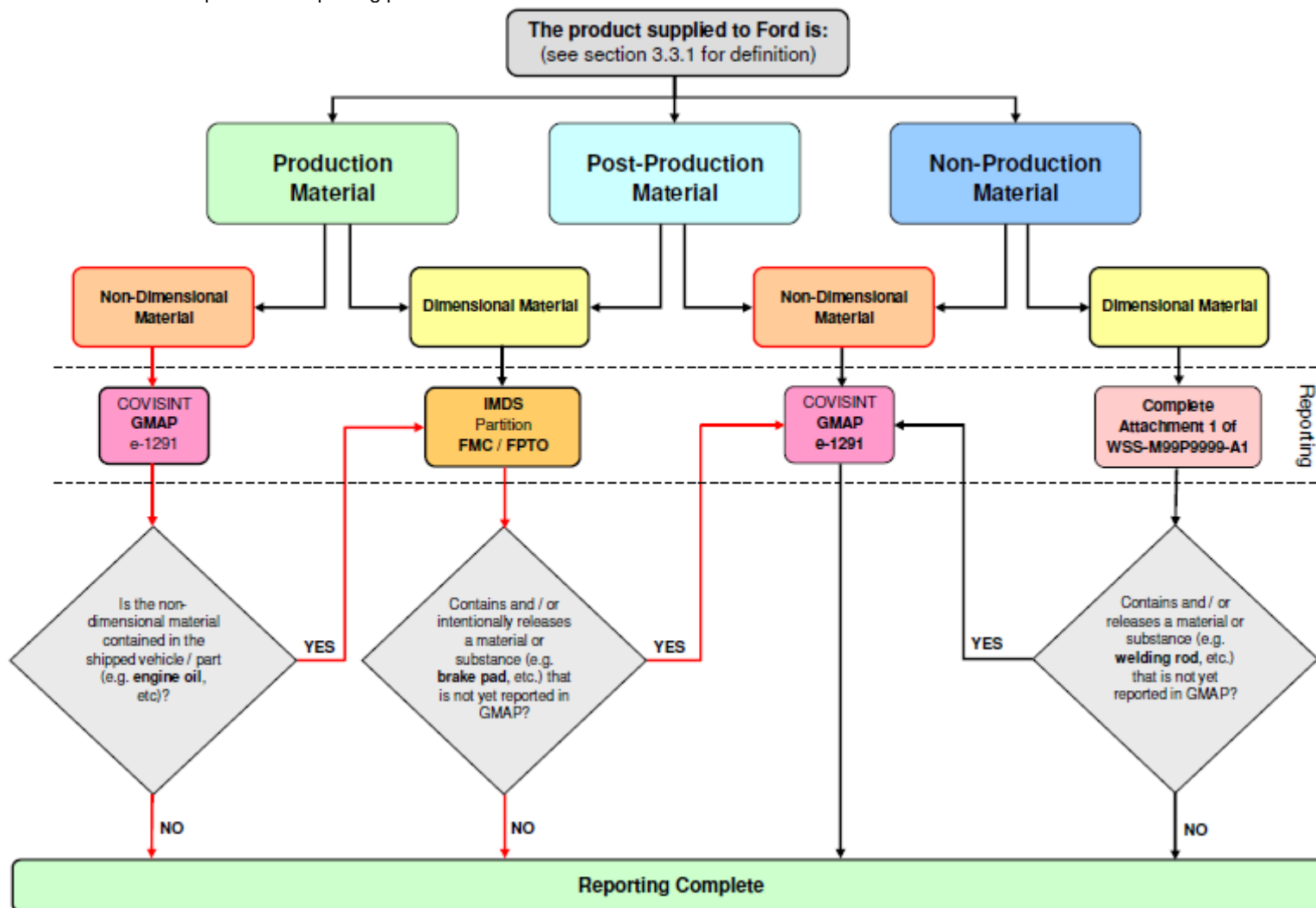
supplier's responsibility to ensure that they identify all affected substances - some of which may not be specifically identified in the GADSL or on the GMAP-e1291 website.

- 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 can 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 TSCA confidential 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 kelle17@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 GMAP e-1291, a PDF of the RSL is available in the material entry screen in GMAP.
- 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) 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) 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.



3.3 Reporting Pathways

This flowchart explains the reporting process for materials.



COVISINT GMAP e-1291 Website: <https://fim.covisint.com/ap/ford?TARGET=https://web.emmg.ford.com/e1291/menu/>.

IMDS Website: <https://www.mdsystem.com/imdsnt/>

Note: For more detailed reporting explanations and examples see Appendix 3 and the RSMS Reporting Requirements document