



2009 Restricted Substance Management Standard

1. [Cover Letter](#)
2. [Reporting Requirements](#)
3. [Reporting Guidelines & Contacts](#)
4. [FAQ's](#)
5. [2009 Restricted Substance Management Standard](#)

[Table 1 – Substances](#)

[Appendix 1 – Definitions](#)

[Appendix 2 – Contacts](#)

[Appendix 3 – Reporting Matrix](#)

[Attachment 1 – Non Production Reporting Form](#)



Ford Motor Company

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

March 30, 2009

To: All Suppliers Doing Business with Ford Motor Company

Subject: 2009 Restricted Substance Management Standard (RSMS) Reporting and Supplier Communication Update

This letter communicates the release of the 2009 RSMS reporting obligations. All Ford Motor Company internal and external suppliers are required to submit data in support of Vehicle Programs' timing deadlines.

Compliance with RSMS is consistent with Ford Motor Company's commitment to environmental responsibility and conformance to governmental regulations in the US and around the globe. Full compliance is a requirement and a key element of Q1, PPAP/PSW and Program Engineering Sign-off events.

Action Required:

- Ensure your company has access to the Ford Supplier Portal.
- Confirm the receipt of this communication, review the requirements (Instructions Attached), obtain parts lists, and report your data as required.
- By December 31, 2009, provide your "Full RSMS Certification" (with part data input in IMDS following vehicle programs timing deadlines) for all products (production and service) in all markets, via the Ford Certification Screen in IMDS and for all non-dimensional production materials via the GMAP-e1291 (see Attachment).

If you have questions, please contact Bing Xu at (313) 805-4888 or bxu1@ford.com. For Volvo Car Corporation specific questions, please contact James Lundström at +46 31 325 8771 or jlundst2@volvocars.com.

Tony Brown
Group Vice President
Global Purchasing

Sue Cischke
Group Vice President
Sustainability, Environment
and Safety Engineering

Derrick Kuzak
Group Vice President
Global Product Development

Steps to Access the GMIR/GMAP e1291 in FSP (Covisint)

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

Technical Requirements

- Internet Explorer 5.0 or higher

To access this web application, you must have:

1. A Covisint User ID and Password.
2. Permission to the Ford Supplier Portal Service.
3. Access to the GMIR Supplier Portal application.
4. Permissions to the applicable parent GSDB code/site GSDB code(s).

If you have all of the above, please follow the steps below. If you are missing any of the above, please go to Section B first before following Section A.

Section A: How to access the GMIR Supplier Portal/GMAP e1291 on the FSP:

- a. Go to <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. **Click to select the Applications tab at the top of the screen.**
- f. In the **Filter by** text field, click the drop-down arrow, select **Environmental** from the list.
- g. Click the **Go** push button.
- h. Under the **GMIR Supplier Portal**, click the **Launch Application** push button. (If you don't see the GMIR application, please see Section B 2.)
- i. Under the **GMIR Supplier Portal** or **GMAP e1291** option, click the **Launch Application** push button.
- j. PPAP approval status is shown in "Parent, Site Metric" or "Complete Parts Report".
- k. For training on the GMIR Supplier Portal, click the **Help** button on the GMIR Supplier Portal Home Page. For training on the GMAP e1291 system, please follow the **e1291 Quick Reference Guide** link.
 - * To certify in the GMAP e1291 application, click the **RSMS Certification (Non-Dimensional Materials)** link.
 - * To certify in IMDS, click the **Certification** link in IMDS at <http://www.mdsystem.com>. Please note that proper access will be needed in order to access the Certification screen. Please contact your IMDS Client Manager for assistance.
- l. Click the **Confirm** button. A confirmation screen is displayed with a reference number that verifies data was saved successfully. The reference number is for information purposes only.

Section B: Information on accessing the Ford Supplier Portal and GMIR

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

- a. A supplier accessing the GMIR Supplier Portal 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 only enter the first four letters/numbers of your GSDB code. For further instructions on registering a **company** on the FSP, go to <https://fsp.covisint.com> and follow the "Register a company for FSP" link.
- d. For "**NEW USER**": Your company is registered with Covisint but YOU do not have a Covisint User ID and password, go to <https://us.register.covisint.com/CommonReg?cmd=REGISTER> and select the "New User" 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 only enter the first four letters/numbers of your GSDB code. For further instructions on registering a **new user** on the FSP, go to <https://fsp.covisint.com> and follow the "Registering a new user for FSP" link.

2. How to get access to the GMIR Supplier Portal?

1. For instructions on requesting access to an application on the FSP, go to <https://fsp.covisint.com> and follow the "How to request an application" link.

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

1. Go to Covisint <https://fsp.covisint.com>.
2. Click the "How do I request additional site codes" link.

If you have any questions or concerns regarding obtaining access to the GMIR Supplier Portal application on the Covisint website, please contact the Covisint help desk. Global Covisint contact information is available at <http://www.covisint.com/support.shtml>.

If you have all access permissions but still have problems accessing the application, please contact the Ford Help Desk at <https://web.fsp.ford.com/support.html>.



2009 Restricted Substance Management Standard: Registration, Evaluation and Authorization of Chemicals (REACH) Reporting Requirements and Guidelines

These requirements should be viewed as the **minimum expectations** and will be used as metrics for the reporting process. Material data submissions should begin immediately to support vehicle program timing and continue to the reporting deadlines.

For the reporting of dimensional materials (hard parts) --- production and service parts, Ford Motor Company subscribes to the Global Automotive Declarable Substance List (GADSL).

Suppliers are required to meet the following reporting deadlines for production and service parts consistent with the Global Production Development System(GPDS)

Underbody/Upperbody phasing logic:

- Current production and service parts (parts considered carryover to the new program) should have already been reported in IMDS. If not, or if an update is required (see below), they must be reported immediately.
- All parts being supplied for any vehicle put in the market in Europe, China or South Korea as well as all parts listed in Program's Bills of Materials (BOM) for other regions must be reported in IMDS (International Material Data System). This applies to any brand of Ford Motor Company. 100% materials, type and weight of all materials, and known GADSL substances in the parts must be included. Full IMDS reporting and full compliance with this Standard must be achieved at the GPDS <PEC> (Preliminary Engineering Completion) gateway (or equivalent gateway for programs using other Production Development Systems, e.g., FPDS), or 8 months before Job 1, whichever comes first.
- Services parts not common with production parts and unique service parts must be reported between <PEC> 8 months and <LR> 5 months before Job #1
- In addition, service unique parts not common with production parts and Past Model service parts, not previously reported as a production part per the assigned Engineering number, are also required to be reported.
- All the parts/materials that need to be reported will be posted in the Ford Global Material Integration and Reporting (GMIR) Supplier Portal (See Appendix). Mazda Motor Corporation will have their own ways of communicating part lists to their suppliers.
- A part must be reported to every brand that uses the part on their individual part number, i.e., a part used by FMC and VCC should be reported to FMC on the FMC part number and to VCC on the VCC part number.

For every reportable part, suppliers are ultimately required to report:

- Substances – All GADSL listed substances (Identity and percent by weight)
- ALL SUBSTANCES IDENTIFIED IN THE GADSL 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 substance 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
- Paints, polymers, adhesives and sealants etc. must be reported in the **cured state.**

If the substance you need to report is not available in IMDS, please supply the IMDS Help Desk with the necessary information, who will update the records accordingly.

Substances listed in RSMS Table 1 and/or GADSL **must not be** marked or reported as "confidential" or "secret" when reporting in IMDS.

- Materials – 100% materials, type and weight of all materials
- Components – Flat reporting is allowed only for electric / electronic components of different product families like assembled printed circuit boards (PCB), hybrids (standard, LTCC) and wire harnesses used in automotive applications. All sub-components in an assembly must appear as such, i.e. as elements in the IMDS datasheet's structure tree.

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 items and calculating the statistical average (arithmetic mean).

A component's stated mass *tolerance* ("Measured Weight" / "Calculated Weight", +/- % on the top node of the component must not exceed the tolerance specified on the appropriate production part drawing or in applicable Quality Management Guidelines.

If no other weight tolerance definition exists (i.e., approved by Ford) the difference between the "Measured weight per item" and the "Calculated weight per item" must be within the following tolerances:-

0-99 g	±20%
100-999 g	±5%
1.0-9.99 kg	±2%
10-99.99 kg	±1%
≥100 kg	±0.5%

- Certify polymeric parts are appropriately marked (per ISO 11469/1043/1629)
- Percentage of recycled content in polymeric materials

An update of existing IMDS data is required if there is:

- >±10% change in end item part mass or more than 50 grams change
- New material
- >±10% change in mass of a material or more than 50 grams change
- New GADSL listed substance added to a material
- >±10% change in mass of an already reported GADSL substance, or if a change in mass causes a threshold requirement to be crossed
- Any change in mass (increase or decrease) of ELV metals (Lead, Mercury, Cadmium and Hexavalent Chromium), exempt and non-exempt applications
- Changes in Polymeric parts marking
- Changes in Recycled content above 10% or more than 50 grams

Suppliers of production/service parts that fall into the above categories must certify compliance to this standard using the Ford certification page in IMDS before Dec 31, 2009.

Ford Asia-Pacific emerging country suppliers need to start reporting/certifying in IMDS once your parts have been released in Ford Worldwide Engineering Release System (WERS) following the same requirements and guidelines in this document. Mazda Motor Corporation will have detailed instructions on how to report and certify in IMDS for Mazda products.

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. In order to provide evidence of RSMS compliance for PPAP submission, suppliers need to log into the GMIR Supplier Portal application on the FSP (Covisint), go to the "Total Parts Submitted via IMDS" report and print the screens for parts requiring a PPAP submission (See Attachment).

Suppliers of facility equipment and tooling (e.g., conveyers, and presses), Office Materials, and Packaging Materials must use the Supplier Restricted Substance Information Reporting Form (Attachment 1 of the RSMS) to report.

Suppliers must report non-dimensional materials and hazardous articles (e.g., dry friction materials) through the GMAP e1291 process following the requirements in GMAP e1291. Suppliers as distributors must cascade the RSMS requirements to your manufacturers and facilitate the manufacturers to comply with RSMS. For information on access to GMAP e1291 <https://fsp.covisint.com> see attachment.

For suppliers who have both non-dimensional materials/hazardous articles and dimensional materials (hard parts), they have to report using both IMDS for hard parts and GMAP e1291 for non-dimensional materials and hazardous articles. By 12/31/2009, they must certify their compliance to RSMS in both IMDS and GMAP e1291 systems following on-line instruction.

Non-dimensional materials such as greases, lubricants, rust preventives, as well as paints, adhesives and sealants, etc., contained in or on dimensional hard parts are required to be reported in IMDS. They need to be reported **IN THEIR FINAL (CURED) STATE**. Ford Toxicology numbers and Ford Material Specification numbers for those materials should also be reported in IMDS Norm/Standard field if they are available. **Also, some "hazardous articles"** are required to be reported via both processes.

Non-dimensional materials with weight information listed in the BOMs are treated as regular hard parts and the datasheets should be sent to Ford (IMDS ID = 102). ***Suppliers of Production Materials in the physical form of a material, a semi-finished component or a rough part must first send their appropriate IMDS datasheet to Ford's database partition FPTO (company ID is 5117) and await the responsible engineering activity's approval. Upon approval the supplier shall send another datasheet – Pseudo-part level – to Ford's database, company ID 102. The formal weight of such datasheets is 1 Gram. Applicable Material Specification Numbers are used as placeholders to be filled in to the IMDS Part Number field.*** VCC wants all parts to be sent to Volvo Car Corporation (IMDS ID 106).

A Datasheet describing parts or materials for current or future production must not be blocked in its *Recipient data* section so that Ford's further referencing usage is inhibited. If forwarding was originally not allowed the supplier is asked to send a new datasheet version including the wanted amendment

Suppliers of non-dimensional materials and hazardous articles, which are not included within Dimensional Products (hard parts) in the vehicles, are required to report using GMAP e1291 process (This does not apply to VCC/Mazda products). Non-dimensional production materials that are not included within hard parts in the vehicles, for which full disclosure of ingredients has been supplied to Ford Toxicology/EQO Office, do not require additional reporting in IMDS. All non-dimensional production material suppliers must certify compliance to RSMS in GMAP-e1291 (<https://fsp.covisint.com>) no later than December 31, 2009 following on-line instruction.

An update of existing GMAP-e1291 data is required if there are changes in:

- Formulation and/or weight percent of RSMS listed substances.
- **NOTE: Product name changes must be disclosed to requestor immediately upon occurrence, and require a new GMAP-e1291 submittal against a new material request, rather than an update referencing the previous product name.**

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
- Manufacturing
- Purchasing
- Materials Engineering
- Environmental/ Regulation
- Health, Safety and Toxicology
- Information Technology
- Quality Manager
- Sales
- 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.

Cascade to Sub-tier Suppliers:

It is the responsibility of Tier 1 suppliers to cascade this standard and all its requirements, including the reporting requirements, to all of your sub-tier suppliers.

Sub-tier supplier data input is a must for complete material data collection. To review the complete communication package, logon to Covisint at: <https://fsp.covisint.com>, click on "Ford Supplier Portal" (FSP), and then click on "CY2009 RSMS Communication Package" found under "Important Documents" then open the "CY2009 RSMS zip" file.

All Ford Motor Company dimensional materials (hard parts) Tier 1 suppliers must use the IMDS system as follows:

- Suppliers access the GMIR Supplier Portal: <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 Program contacts in GMIR Portal for the Program or Ford RSMS Helpdesk. However, not all Ford brands' parts are in the GMIR Supplier Portal, Mazda have their own ways to communicate the parts you need to report. For Service parts, suppliers need to access: <https://web.purinfo.ford.com/>.

- **For the parts that are not in the GMIR 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 sent/proposed to Ford Motor Company in IMDS you will need to select the appropriate brand as the recipient i.e. – Ford (including Lincoln/Mercury), Jaguar, Mazda, Volvo or Land Rover. 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 people. However, suppliers reporting for site level information will also require their 4-digit GSDB parent code for validation purposes.
- 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 sub-components (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 consignment (bailed) parts, if suppliers have both Ford end-item part number (via a bailment or consignment agreement) and your customer (Ford Tier one supplier) part number for the bailed part, you need to use "Propose" in IMDS to send the part data sheet to both Ford and your customers. If you don't have Ford end-item part numbers, you need to send directly to your customers (Ford Tier 1 suppliers) 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.

REPORTING GUIDELINES:

These guidelines are applicable to Ford Motor Company only. Ford will accept material data sheets created following IMDS recommendations.

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:

- **Component (Part or Assembly) – REQUIRED**
 - **Sub-component(s) (component parts) – OPTIONAL**
 - **Semi- (finished) component – OPTIONAL**
 - **Material(s) - REQUIRED**
 - ▲ **Basic Substance(s) – Global Automotive Declarable Substance List (GADSL) substances are REQUIRED**
 - ▲ **Basic Substance(s) – Remaining substances are OPTIONAL**
 - ▲ **Basic Substance(s) - MISC. (TO BRING TOTAL TO 100%)**
- **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.
- **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.
- **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 object 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.
- **Material - 100% of the materials in your products need to be declared.**
 - Basic substances should only be associated with a material (basic substances should not be attached directly to components or sub-component/semi components).
 - The sum of the material weight defines the total part/assembly weight.
 - Surface treatments, such as chromate passivations, should be entered as a material (attached to a semi-finished component).
 - The material classification field must be filled in. (Ford Motor Company uses this field to calculate recyclability). The use of the *undefined* classification must be avoided.
- ▲ **Basic Substance(s) – GADSL listed substances have to be disclosed.**
 - Must be entered in the form as they exist in the material (i.e. elemental breakdown for polymers C, H, N, O etc., is **NOT** acceptable).
 - A material needs to have 100% (total weight) basic substances associated to it, before it can be released.
 - “**Misc.**” may be used to describe the remainder of the substances other than the GADSL listed substances to achieve 100% (total weight). Search code is "Misc".
 - Basic Substance disclosure requirements may increase in the future, data sheets with the minimum level of information may need revisiting in the future. Thus, Ford recommends that suppliers report their parts following IMDS recommendations published in IMDS Recommendation page.
 - For any substances on the GADSL list, 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 each substance on the GADSL list.

Publishing Material Data Sheet (MDS)

- **1st tier suppliers should send a 1st tier part description to Ford Motor Company. Do not publish the MDS.** As Ford downloads only all of their own MDSs from IMDS, the published ones will not be included.

Sending MDSs

- This function is used to send an MDS to a single recipient only.
- The recipient is specified and can either be another supplier or an OEM.

Proposing MDSs

- This function is used to send an MDS to several recipients.
- The recipients are specified and can either be another supplier or an OEM.

Copy or New Version (VCC only)

- COPY – this assigns a new ID number to the MDS, and should be used if your end item has a different VCC part number than the originally selected MDS (i.e. used for similar parts, LH /RH parts etc.)
- NEW VERSION – this keeps the same ID number, but updates the version number. This should only be used if the MDS is for the same VCC part number as the originally selected MDS. Only the latest version is valid!

General Guidelines (summarized in table below)

Field	Requirement	Comment
Description	<ul style="list-style-type: none"> Part names 	
Material Name	<ul style="list-style-type: none"> Polymer material to ISO 1043 Should be descriptive and not generic, e.g. "Spring Steel Wire A DIN 17223" not "Steel" 	
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
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.	
Supplier	Material supplier	
Declarable/Prohibited Substances	All GADSL listed substances must be reported in Basic Substances field. The supplier must know the reason the substance is used. When sending the material to Ford, IMDS will require the selection of an APPLICATION ID for each substance on the GADSL.	For PVC (material), chloroethylene polymer is the basic substance. See Ford Frequently Asked Questions for Application ID.
Jokers	Jokers are used to fill up a material to 100% disclosure (e.g. "Misc."). Jokers must not be used to hide substances in the GADSL list. A Joker should be treated as a substance and always be attached to a material.	A Joker is a substance in IMDS that has no substance information attached to it.
Flat Bill of Materials (see Frequently Asked Questions)	Still require material content of major constituents (e.g. housings / polymer coated wires / circuit board material)	

Field	Requirement	Comment
<p>Recyclate Information Previously called "Security/Environment" (Chapter 2 in IMDS)</p>	<p>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.</p> <p>1. Amount of contained recyclate as released? What is stated on the drawing or the documentation of the part?</p> <p>2. Amount of contained recyclate as measured? What is the actual content of recycled material in the part?</p> <p>3. Amount of contained recyclate – post-industrial recyclate? How much of the recycled content is from postindustrial waste (per part weight).</p> <p>4. Amount of contained recyclate - post consumer recyclate? How much of the recycled content is from post consumer waste (per part weight)</p>	
<p>Part number</p>	<p>The Ford End-Item part numbers, or Land Rover, Aston Martin, Volvo, Mazda unique part numbers. All prefix, base and suffix should be entered, " * " and "wild-cards" are not allowed. Input "-" in between prefix, base and suffix.</p> <p>For service parts, please enter the engineering part number as follows:</p> <ul style="list-style-type: none"> For all non-WERS origin-engineering parts, input with the engineering part number packed without delimiters or spaces (e.g., EA0332603D or E9WB17K831BAZJAE). <p>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).</p>	<p>Must be entered as in the GMIR Portal part list.</p> <p>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.</p>
<p>Measured Weight Calculated weight</p>	<p>The actual weight of the component, as measured by the supplier. The total weight of the material under the component</p>	<p>Must be inserted Must equal the Measured weight within the specified tolerance.</p>

Ford Motor Company IMDS contact information

Ford North America:

Bing Xu e-mail: bxu1@ford.com

Ford Europe:

Dr. Carl-Ludwig Voss e-mail: cvoss@ford.com

Jaguar/Land Rover:

Matt Griffin e-mail: mgriff52@landrover.com

Volvo:

James Lundström e-mail: jlundst2@volvocars.com
Katarina Sundqvist e-mail: ksundqv2@volvocars.com

Ford South American Operations:

Lucia Rama e-mail: lrama@ford.com

Ford Asia Pacific Operations:

Natalie Wu e-mail: nwu@ford.com
Ashley Walsh e-mail: AWALSH26@ford.com

Mazda:

Tsuyoshi Nishijima e-mail: nishijima.ts@mazda.co.jp

How to Access The International Material Data System

IMDS can be accessed through: <http://www.mdsystem.com>. There you can click on 'contact' to get the IMDS service center telephone number and email address, which are currently:

Europe: + 36 1 298 1536, or: imds-eds-helpdesk@eds.com/,

North America: +1 972-403-3607, or imds-eds-helpdesk-nao@eds.com.

France +33 1 55 69 7860, or imds-eds-helpdesk@eds.com

Japan: +81 3 3797 4212, or jpimdshd@eds.com.

Korea: + 82-2-3782-0827 or imdsk.helpdesk@eds.com

China: +86 27 87431668 or IMDS-EDS-Helpdesk-China@eds.com

To register for an IMDS account, please go to <http://mdsystem.com>, and click on "public IMDS pages". Then click on "Contact" and "Online Registration". Then follow the instructions. The IMDS website also provides questions and answers, system requirements, contact information, etc. Classroom IMDS training can be requested using the web page.

Steps to Access the GMIR/GMAP e1291/REACH Confirmation Screen in FSP (Covisint)

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

Technical Requirements

- Internet Explorer 5.0 or higher

To access this web application, you must have:

1. A Covisint User ID and Password
2. Permission to the Ford Supplier Portal Service.
3. Access to the GMIR Supplier Portal application.
4. Permissions to the applicable parent GSDB code/site GSDB code(s).

If you have all of the above please follow the steps below. If you are missing any of the above please go to Section B first before following Section A.

Section A: How to access the GMIR Supplier Portal/GMAP e1291 on the FSP:

- a. Go to **<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. **Click to select the Applications tab at the top of the screen.**
- f. In **Filter by** text field, click the drop-down arrow, select **Environmental** from the list.
- g. Click the **Go** push button.
- h. Under the **GMIR Supplier Portal** click the **Launch Application** push button.(If you don't see the GMIR application please see Section B 2.)
- i. Under the **GMIR Supplier Portal** or **GMAP e1291** option, click the **Launch Application** push button.
- j. PPAP approval status is shown in "Parent, Site Metric" or "Complete Parts Report".
- k. For training on the GMIR Supplier Portal, click the **Help** button on the GMIR Supplier Portal Home Page. For training on the GMAP e1291 system, please follow the **e1291 Quick Reference Guide** link.
 - * To certify in the GMAP e1291 application, click the **RSMS Certification – (Non-Dimensional Materials)** link.
 - * To certify in IMDS, click the **Certification** link in IMDS at <http://www.mdssystem.com>. Please note that proper access will be needed in order to access the Certification screen. Please contact your IMDS Client Manager for assistance.
- l. Click the **Confirm** button. A confirmation screen is displayed with a reference number that verifies data was saved successfully. The reference number is for information purposes only.

Section B: Information on accessing the Ford Supplier Portal and GMIR

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

- a. A supplier accessing the GMIR Supplier Portal 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 only enter the first four letters/numbers of your GSDB code. For further instructions on registering a **company** on the FSP, go to <https://fsp.covisint.com> and follow the "Register a company for FSP" link.
- d. For "**NEW USER**": Your company is registered with Covisint, but YOU do not have a Covisint User ID and password, go to <https://us.register.covisint.com/CommonReg?cmd=REGISTER> and select the "New User" 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 only enter the first four letters/numbers of your GSDB code. For further instructions on registering a **new user** on the FSP, go to <https://fsp.covisint.com> and follow the "Registering a new user for FSP" link.

2. How to get access to the GMIR Supplier Portal?

1. For instructions on requesting access to an application on the FSP, go to <https://fsp.covisint.com> and follow the "How to request an application" link.

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

1. Go to Covisint <https://fsp.covisint.com>.
2. Click the "How do I request additional site codes" link.

If you have any questions or concerns regarding obtaining access to the GMIR Supplier Portal application on the Covisint website, please contact the Covisint help desk. Global Covisint contact information is available at <http://www.covisint.com/support.shtml> .

If you have all access permissions but still have problems to access the application please contact the Ford Help Desk on <https://web.fsp.ford.com/support.html> .

2009 FORD RSMS FAQs

GMIR Supplier Portal

1. Outdated or obsolete part numbers are displaying on the GMIR 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 GMIR 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 GMIR 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 "Accepted with errors" – 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 generate error #4? I have researched the part ingredients screen in IMDS and cannot identify the substance of concern that is causing this issue.
A: This error 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 table 1 in order to understand the applications for each substance.
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 GMIR Supplier Portal to check which parts should be reported. If you reported parts that are not in the GMIR Portal, you will most probably get an un-matched parts issue. You should report whatever parts are in the GMIR Supplier Portal, and certify all the remaining parts supplied by your company meet the requirements of the RSMS. However, not all Ford brands' parts are in the GMIR Supplier Portal, Mazda has their own ways to communicate the parts you need to report. Service parts please see the FAQ #22.
6. I have researched my parent level/site level metrics on the GMIR 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, Land Rover IMDS ID 1472, Jaguar IMDS ID 297, Aston Martin Lagonda IMDS ID 15095, Volvo IMDS ID 106 and Mazda IMDS ID 3100), using the correct GSDB code. The GMIR 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 GMIR 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 GMIR 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 GMIR 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://fsp.covisint.com/>.

10. I no longer wish to receive the monthly status email from the GMIR Supplier Portal. How do I change the contacts that will receive this email from Ford?

A: The person in your organization who receives the Ford's status report is up to you. You can change your contact info in the confirmation screen in GMIR.

11. What are the criteria for me to update previously reported parts in IMDS?

A: An update of existing IMDS data is required if, for End-Item Part, there is:

- **>+/- 10% change in end item part mass or more than 50 grams change**
- **New material**
- **New GADSL listed substance added to a material**
- **>+/- 10% change in mass of an already reported GADSL substance, or if a change in mass causes a threshold requirement to be crossed**
- **Any change in mass (increase or decrease) of ELV metals (Lead, Mercury, Cadmium and Hexavalent Chromium), exempt and non-exempt applications**
- **Changes in Polymeric parts marking**
- **Changes in Recycled content above 10% or more than 50 grams**
- **Change in Part Number. For FMC this means prefix, base, and first digit of suffix, e.g., AB to BC. If second and beyond digits of the suffix are changed with no other changes mentioned above, no need to resubmit.**

General FAQs

12. Can you explain the RSMS certification process in IMDS and GMAP e1291? 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 GMIR Supplier Portal and will be going thru PPAP/PSW has to be reported in IMDS. For the parts which are not in the GMIR 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 GMIR Supplier Portal, even you submitted the certification.

For non-dimensional production materials, suppliers need to access GMAP e1291 in <https://fsp.covisint.com> to certify before 12/31/2009. Supplier needs to first confirm and enter contact information and then can certify in the certification page. A list of toxicology numbers of the materials the supplier supplied to Ford will be shown. If the material is obsolete or no longer shipped to Ford, the supplier needs to comment in the comment field. If the supplier has more materials supplied to Ford, but they are not listed in the certification screen, the supplier needs to contact Ford engineers to do Re-review for these missing materials in GMAP. This year, only Production non-dimensional materials will be in scope, non-production and post production non-dimensional materials will be included in the future.

13. 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.

14. 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 Public Page, under NEWS, to check RSMS package released by Ford.

15. 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.

16. 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.

17. Who receives the notification email from Ford when a part fails a "Data Quality Check" and is assigned an error? 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 modifications, you have to send the data under your contact information.

18. What are the non-dimensional material reporting process/requirements?

A: Suppliers must report your non-dimensional production materials and hazardous materials (e.g., dry friction material) through the GMAP e1291 process following the requirements in GMAP e1291 before December 31, 2009. Certain regions may not be able to use GMAP e1291 pending on the roll out of the process and systems. All non-dimensional production material suppliers must certify compliance to RSMS in GMAP-e1291 no later than December 31, 2009. Please access RSMS non-dimensional material certification page through

19. 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 GMAP e1291 before 12/31/2009. Manufacturers can apply for a special Ford GSDB code so that you can enter Ford GMAP e1291 process.

20. 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 every substance in the RSMS, Ford requires an appropriate application code.

21. How can I know which service parts Ford wants us to report?

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 LeBoeuf, Jerome at jleboeuf@ford.com

22. I have a part with a substance on the RSMS Table 1 list, but it is not a Global Automotive Declarable Substance List (GADSL) substance. Do I still have to report in IMDS?

A: Ford's RSMS list is the same as GADSL for hard parts IMDS reporting. However, RSMS does also control non-production materials/substances which are beyond the GADSL listed substances. Ford does not require suppliers to report substances that are not in the GADSL list for IMDS reporting. However, Ford recommends that suppliers follow the IMDS Recommendations for reporting. Ford will accept the data sheets created by following IMDS recommendations.

23. If I add an in-process substance that converts to a GADSL substance in the manufacturing process, is this considered "unintentionally added"?

A: No. It is considered intentionally added and must be reported or eliminated.

24. 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. Section 4.1 of the 2009 RSMS provides the IMDS data resubmission criteria of production/service parts based on new materials additions to the 2009 RSMS.

Exemption status and reporting requirements for Service parts for vehicles built before and after 1 July 2003 are specifically addressed in Sect. 4.4 of the RSMS.

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 substance reporting in IMDS is not required, unless the vehicle application is 2004MY or later.

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 quality check error code # 4, 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 yr application intelligence in GMIR to allow ELV/RSMS Heavy metals in past model parts.

Knowing the uncertainties of service and deviated parts exemption timing, the following statement was added to the GMIR error code # 4 Supplier e-mail notification to alleviate supplier concerns.

"All parts must be in compliance with the current years RSMS with some exceptions (FCSD Service Parts-Section 4.4 and deviations)"

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.

25. Where do I get an Asia Pacific Program parts list on the GMIR Supplier Portal?

A: Select the Region—Asia Pacific, then you can see the Programs listed. In case you have any question, please contact Lee Shao at xshao2@ford.com.

26. 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/Jaguar/Land Rover 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 GMIR will be retrieved and may not necessarily be the highest suffix match. The Mazda fuzzy match algorithm will match to the first nine characters of the part base, with the exception of parts where the first character of the base is a "9".

Please note that Volvo does not use a fuzzy matching algorithm and rely on exact match part submissions only.

27. How do I furnish proof for the Production Part Approval Process (PPAP) submission?

A: Suppliers should use the GMIR Supplier Portal Total Parts Submitted via IMDS report to furnish proof of RSMS compliance for PPAP. For more information on this report, see page Error! Bookmark not defined. of the GMIR Supplier Portal Manual. In order to access the GMIR Supplier Portal Manual, users must log into the GMIR Supplier Portal application and click the "Help" button that is located in the header.

28. Are there any special GMIR report printing instructions for the Production Part Approval Process (PPAP)?

A: When printing the GMIR 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. For more information on the Total Parts Submitted via IMDS report, see page Error! Bookmark not defined. of the GMIR Supplier Portal Manual. In order to access the GMIR Supplier Portal Manual, users must log into the GMIR Supplier Portal application and click the "Help" button that is located in the header.



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. By regulation or by Ford direction, these substances shall be restricted in 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 product to Ford to comply with this Restricted Substance Management Standard.

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.

This Standard replaces and supersedes specifications SK-M99P9999-A, WSS-M99P9999-A2, WSS-M99P9999-A3, Jaguar Cars JAS.01.01.17, and Volvo Car Corporation Standard 1009, 1 ('Black List') and 1009, 11 ('Grey List'). When any of those numbers appear on other documents, the requirements of this Standard apply. References to "Ford" within this document shall be understood to include Jaguar Cars, Volvo Car Corporation, Land Rover, all joint venture vehicles that are Ford badged, e.g., JMC, ChangAn, Otosan, and Mazda Motor Corporation (Mazda - "for joint venture production parts only").

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 2009 RSMS reporting timing covers 2010 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

The primary intent of this Standard is to control restricted substances within formed articles. However, 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. A web-based tool (GMAP-e1291) has been launched via the Covisint - Ford Supplier Portal to support this process https://web.emmg.ford.com/e1291/menu/. This clearance must be completed prior to supply of product to Ford. Details of any brand-specific direction and this process can be obtained by contacting the appropriate regional Toxicology or Environmental Quality Office (EQO) (see Appendix 2). It is the duty of all Suppliers of product to Ford to comply with this Restricted Substance Management Standard.

Date	Action	Revisions
03/25/09	Activated	2009 Revisions are highlighted in grey B. Xu
2008 10 29	Revised	2008.5 Revisions are highlighted in grey E. Rezendes
1984 01 11	Activated	E. Rezendes



3.1 ALL PRODUCTS

Section 3.1 relates to general requirements affecting all product supplied to Ford. Individual restricted substances are alphabetically listed, with the type of restriction indicated, in Table 1, and are also referred to indirectly on a hazardous properties basis in 3.1.5.

- 3.1.1 Paragraph deleted. Refer to Section 4.
- 3.1.2 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.**
- 3.1.3 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.
- 3.1.4 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.
- 3.1.5 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-e1291approval process, where applicable, at <https://web.emmg.ford.com/e1291/menu/>).
- 3.1.6 Paragraph deleted, addressed in para 3.1.5.
- 3.1.7 Paragraph deleted addressed in Table 1
- 3.1.8 Products of or from ENDANGERED SPECIES must not be supplied to Ford Motor Company in any form.
- 3.1.9 Suppliers of facility machinery, equipment and/or tooling (e.g., conveyers, presses etc), that contain any of the substances listed in Table 1 as "prohibited" or "prohibited above the threshold concentration" must submit the Supplier Restricted Substance Information Reporting Form (Attachment 1) and conform to section 4.5.1 prior to shipment to Ford.
- 3.1.10 Suppliers shall not supply products containing substances that will, in use, adversely affect the vehicle interior with respect to human health including allergic reactions without notification and acknowledgement from the appropriate Ford Motor Company, **Materials & Standards Engineering activity.**



- 3.1.11 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 example, the sources may include process control and production applications such as density, level, thickness, moisture, back-scatter gauges; locators, coating measurement, radiographic installation, air ionizers, electron beam welders, tool failure detection, and radiation cure installations.

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

http://ec.europa.eu/energy/nuclear/radioprotection/publication/doc/122_part1_en.pdf
http://ec.europa.eu/energy/nuclear/radioprotection/publication/doc/122_part2_en.pdf

- 3.1.12 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)

- 3.1.13 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

- 3.2.1 Substance Restrictions are identified in Table 1 by substance name, type of restriction, threshold limit (where applicable), applications affected/exempted, and effective dates.
- 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.
- 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 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.



- 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://portal.covisint.com> and in the "News" section of IMDS at, http://www.mdsystem.de/html/en/home_en.htm. Additional CAS-identified substances listed in this Standard affecting non-dimensional materials (chemical products) and "hazardous" articles will be available on the GMAP-e1291 website (<https://web.emmg.ford.com/e1291/menu/index.htm>). 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.
- 3.2.6 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 FPDS/GPDS 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 Table 1 of this Standard.
- 3.2.7 For production parts, unless otherwise noted, the Effective Date column of Table 1 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.

4. RESTRICTED SUBSTANCE AND RECYCLED CONTENT REPORTING

SUPPLIERS REPORTED DATA WILL BE USED TO PROVE LEGAL COMPLIANCE.

FOR THE REPORTING OF NON DIMENSIONAL MATERIALS and/or "HAZARDOUS" ARTICLES, SUPPLIERS ARE REQUIRED TO GO THROUGH THE GMAP-e1291 PROCESS (where applicable).

FOR THE REPORTING OF PRODUCTION PARTS (INCLUDING SERVICE PARTS), FORD MOTOR COMPANY SUBSCRIBES TO THE GLOBAL AUTOMOTIVE DECLARABLE SUBSTANCE LIST (GADSL, <http://www.gadsl.org>)

Suppliers are required to meet the following reporting deadlines for production and service parts:

- All parts being supplied for any vehicle put in the market in Europe, China or South Korea as well as all parts listed in Program's Bills of Materials (BOM) for other regions must be reported in IMDS (International Material Data System). This applies to any brand of Ford Motor Company. 100% materials, type and weight of all materials, and known GADSL substances in the parts must be included. Full IMDS reporting and full compliance with this Standard must be achieved at the GPDS <PEC> (Preliminary Engineering Completion) gateway (or equivalent gateway for programs using other Production Development Systems, e.g., FPDS), or 8 months before Job 1, whichever comes first.
- Current production and service parts should have already been reported in IMDS. If they are not, or if an update is required (see below), they must be reported immediately.
- Services parts not common with production parts and unique service parts must be reported between <PEC> 8 months and <LR> 5 months before Job #1

A Reporting Matrix is shown in Appendix 3 to clarify the appropriate reporting mechanism for suppliers concerning material and substance content in products supplied to Ford Motor Company.



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

ALL PARTS AND MATERIALS REMAINING ON A VEHICLE AT POINT OF SALE AND ALL SERVICE PARTS ARE REQUIRED TO BE REPORTED USING IMDS.

Suppliers are required to report:

- Substances – All GADSL listed substances (Identity and percent by weight)
 - Materials – 100% materials, type and weight of all materials
 - Components – Flat reporting is allowed only for electric / electronic components of different product families like assembled printed circuit boards (PCB), hybrids (standard, LTCC) and wire harnesses used in automotive applications. All sub-components in an assembly must appear as such, i.e. as elements in the IMDS datasheet's structure tree.
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 items and calculating the statistical average (arithmetic mean).
A component's stated mass *tolerance* ("Measured Weight" / "Calculated Weight", +/- % on the top node of the component must not exceed the tolerance specified on the appropriate production part drawing or in applicable Quality Management Guidelines.
If no other weight tolerance definition exists (i.e., approved by Ford) the difference between the "Measured weight per item" and the "Calculated weight per item" must be within the following tolerances:-
- | | |
|-------------|-------|
| 0-99 g | +20% |
| 100-999 g | +5% |
| 1.0-9.99 kg | +2% |
| 10-99.99 kg | +1% |
| ≥100 kg | +0.5% |
- Certify polymeric parts are appropriately marked (per ISO 11469/1043/1629)
 - Percentage of recycled content in polymeric materials

An update of existing IMDS data is required if there is:

- >±10% change in end item part mass or more than 50 grams change
- New material
- >±10% change in mass of a material or more than 50 grams change
- New GADSL listed substance added to a material
- >±10% change in mass of an already reported GADSL substance, or if a change in mass causes a threshold requirement to be crossed
- Any change in mass (increase or decrease) of ELV metals (Lead, Mercury, Cadmium and Hexavalent Chromium), exempt and non-exempt applications
- Changes in Polymeric parts marking
- Changes in Recycled content above 10% or more than 50 grams

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

For training and access registration, contact the IMDS-Helpdesk and Service Center.

Europe:	+ 36 1 298 1536, or: ims-eds-helpdesk@eds.com/ ,
North America:	1 972-403-3607, or imds-eds-helpdesk-nao@eds.com .
France	+33 1 55 69 7860 or imds-eds-helpdesk@eds.com
Japan:	+81 3 3797 4212, or jpimds@eds.com .
Korea:	+ 82-2-3782-0827 or imdsk.helpdesk@eds.com
China	+86 27 87431668 or IMDS-EDS-Helpdesk-China@eds.com



4.2 Paragraph deleted.

4.3 SUBSTANCE DISCLOSURE IN IMDS

All substances contained in "The Global Automotive Declarable Substance List" (GADSL), MUST be disclosed in IMDS.

- ALL SUBSTANCES IDENTIFIED IN THE GADSL 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 substance 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
- Paints, polymers, adhesives and sealants etc. must be reported in the cured state.

If the substance you need to report is not available in IMDS, please supply the IMDS Help Desk with the necessary information, who will update the records accordingly.

Substances listed in RSMS Table 1 and/or GADSL must not be marked or reported as "confidential" or "secret" when reporting in IMDS.

4.4 PART NUMBER REQUIREMENTS FOR IMDS

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 through out 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.

Service unique parts, not common with production parts and Past Model service parts, not previously reported as a production part per the assigned Engineering number, are also required to be reported in accordance with Sect. 4.0 of this Specification.

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 Table 1 for countries outside North America and Japan not following EU ELV directive).



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 (Table 1 of this standard), **except, for the following spare parts where higher thresholds are allowed:**

- o Aluminium for machining purposes with a lead content up to 2 % by weight for vehicles put on the market before 1 July 2005,
- o Aluminium for machining purposes with a lead content up to 1.5 % by weight for vehicles put on the market before 1 July 2008,
- o Lead in bearing shells and bushes for vehicles put on the market before 1 July 2008
- o Lead in bearing shells and bushes in engines, transmissions and air conditioning compressors. for vehicles put on the market before 1 July 2011
- o Lead in solder for electronic circuit boards and other electrical applications for vehicles type approved before 31 December 2010 (NOTE: For certain applications, revisions will be discussed with the European Commission in 2009 to extend exemptions).
- o Lead in pyrotechnic initiators for vehicles type-approved before 1 July 2006.
- o 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
- o 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
- o Lead in valve seats for engine types developed before 1 July 2003
- o Hexavalent Chromium in corrosion preventive coatings for vehicles put on the market before 1 July 2007
- o 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.

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 an exemption (effective dates as listed in Table 1). All new materials used in the refurbishment of these parts **MUST** comply with the substance restrictions contained within this standard.



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

4.5.1 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 insure** that their products supplied to Ford containing substances that are listed in Table 1 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 its 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 illegal 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 above mentioned Table 1 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", suppliers are required to send information on articles that contain > 0.1% of Substances of Very High Concern (SVHC) including safe use but at least the substance name. This information must be sent to RSMSstat@ford.com (rsmsvcc@volvocars.com for Volvo components). This mailbox must be used to report all articles that have substances present in the RSMS list above 0.1% per article.

4.5.2 Non-dimensional materials.

Suppliers of non-dimensional materials, which are **not associated within Dimensional Products**, (e.g., bulk chemicals, individually packaged chemicals sold separately or included in service kits), are subject to the restriction requirements of this Standard (RSMS). Substances listed in this Standard and highlighted in sections 3.1.5, 3.1.7 and 3.1.8 must be reported (e.g., through the GMAP - e1291 system). Non-dimensional materials for which full disclosure of RSMS-listed ingredients has been supplied to Toxicology and EQO Office according to Section 3.1.2 of this Standard, do not require additional reporting, and will be certified through the GMAP-e1291 system, where applicable.

An update of existing GMAP-e1291 data is required if there are changes in:

- Formulation and/or weight percent of RSMS listed substances.
- Product name changes must be disclosed to requestor immediately upon occurrence and require a new GMAP-e1291 submittal against a new material request, rather than an update.



4.5.3 "Hazardous articles" **that do not remain on a vehicle at point of sale**, do not require disclosure in IMDS.

4.5.4 **Packaging Materials and Other Non production Hard Parts (office supplies, etc.)**

Same REACH rules apply as described in 4.5.1. Please note that packaging material is considered as an article under the REACH regulation

4.6 PARTS AND MATERIALS THAT REQUIRE REPORTING BOTH IN IMDS AND GMAP- E1291

Non-dimensional Materials Contained in or on Dimensional Products such as; greases, lubricants, rust preventives, as well as paints, adhesives and sealants, etc are required to be reported in IMDS in the cured state, and via GMAP-e1291 (where applicable), if known or reasonably anticipated to pose a health or environmental hazard during normal handling, use, service or disposal (in the as received or uncured state). Also, some "hazardous articles" (e.g., dry friction materials) are required to be reported via both processes.

4.7 CERTIFICATION

4.7.1 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, 2009**. 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 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.

4.7.2 Non-dimensional Materials Certification

All non-dimensional production material suppliers must certify compliance to RSMS in GMAP-e1291 no later than **December 31, 2009**. Certifiers must have access to the Covisint website. By certifying RSMS in GMAP-e1291, the supplier is taking the responsibility that their materials comply with the requirements in the latest issue of the RSMS.

If suppliers have both non-dimensional materials and dimensional materials (parts), the suppliers must certify in both the IMDS and GMAP-e1291 sites.

Suppliers that have not migrated to the "Ford Supplier Portal" should do so immediately, using <https://portal.covisint.com>. Once in the "logon screen" click on "membership" then click "help" and complete enrollment form for registration.



4.7.3 REACH Supplier Confirmation

REACH (EU Regulation concerning the Registration, Evaluation, Authorization and Restriction of Chemicals, 1907/2006)

Suppliers are required to complete the new 'REACH supplier confirmation' screen within the Ford Supplier Portal (<http://fsp.covisint.com>) to confirm that materials supplied to any Ford Business operating in Europe (including Land Rover, Jaguar and Volvo) will comply with the new regulation. All materials used within the European Union, Norway, Liechtenstein and Iceland, falling under the criteria set within the regulation (i.e. tonnage band, physical properties, toxicity etc.), must be registered within the defined time periods. Ford Motor Company requires that suppliers inform the company of potential non-compliance, including information regarding the intention to pre-register and register substances contained in their products supplied to any Ford Business operating in Europe. A central contact is also requested to manage all inter-company correspondence regarding compliance with REACH.

5. GENERAL INFORMATION

- 5.1 Definitions for technical terms are provided in Appendix 1.
- 5.2 Additional information may be obtained through the activities 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 Please note that any PII (Personally Identifiable Information) that you provide in IMDS and the GMIR Supplier Portal to Ford Motor Company (which includes, Land Rover, Jaguar Cars, Volvo Car Corporation and Mazda Motor Corporation), will be stored and processed in Ford of North America (Dearborn, Michigan).



TABLE 1
SUBSTANCE RESTRICTIONS

Row Number	Substance (a)	Classification	GADSL (to be reported in IMDS)	Threshold (b)	Applications Affected	Effective Date
1	Acetaldehyde	D	Yes	0.1%	All Products	Immediate
2	Acetamide	D	Yes	0.1%	All Products	Immediate
3	Acrylamide	D	Yes	0.1%	All Products	Immediate
4	Acetonitrile	D	Yes	0.1%	All Products	Immediate
5	Acrylonitrile	D	Yes	0.1%	All Products	Immediate
6	Alkylphenols (Nonyl / Octyl)					
6.1	Nonylphenols	P	No	0.1%	Detergent (surfactants), cleaners, metal working products and WWTP(d) chemicals	Immediate
6.2	Nonylphenols	D	No	0.1%	All Products	Immediate
6.3	Octylphenol	D	No	0.1%	All Products	
7	Alkylphenol Ethoxylates (Nonyl / Octyl)					Immediate
7.1	Nonylphenol ethoxylates	P	Yes (c)	0.1%	Detergent (surfactants), cleaners, metal working products and WWTP(d) chemicals	Immediate
7.2	Nonylphenol ethoxylates	D	No	0.1%	All Products	Immediate
7.3	Octylphenol ethoxylate	D	No	0.1%	All Products	Immediate
8	Aniline and its salts	D	Yes	0.1%	All Products	Immediate

- a) All substances listed in Table 1 must be immediately declared if their current percent content by weight, per homogeneous material exceeds the stated threshold for future prohibition.
- b) Certain substances are subject to a specified upper threshold, stated as weight percent content in a material (see the definition of "Material" in **Appendix 1**). Suppliers must report content if substances exceed listed the threshold percentage, by weight per homogeneous material (See definition of Homogeneous Material in **Appendix 1**
- c) Only Nonylphenol ethoxylates on the GADSL are required to be reported in IMDS.
- d) Waste Water Treatment Plant



TABLE 1
SUBSTANCE RESTRICTIONS

Row Number	Substance (a)	Classification	GADSL (to be reported in IMDS)	Threshold (b)	Applications Affected	Effective Date
9	Anthracene	D	Yes	0.1%	All Products	Immediate
10	Antimonytrioxide (Diantimonytrioxide)	D	Yes	0.1%	All Products	Immediate
11	Aromatic amines or their salts:					
11.1	4-Aminobiphenyl or its salts	P	Yes	0.01%	All Products	Immediate
11.2	Benzidine or its salts	P	Yes	(c)	All Products	Immediate
11.3	2-Naphthylamine or its salts	P	Yes	0.01%	All Products	Immediate
11.4	4-Nitrobiphenyl or its salts	P	Yes	0.01%	All Products	Immediate
12	Arsenic or its compounds	D	Yes	0.01% (unless present in metals & alloys, then the declaration limit is 0.05%).	All Products	Immediate
12.1	Organoarsenic compounds	P	Yes (as Arsenic compound)	0.01%	All Products	Immediate

- a) All substances listed in Table 1 must be immediately declared if their current percent content by weight, per homogeneous material exceeds the stated threshold for future prohibition.
- b) Certain substances are subject to a specified upper threshold, stated as weight percent content in a material (see the definition of "Material" in **Appendix 1**). Suppliers must report content if substances exceed listed the threshold percentage, by weight per homogeneous material (See definition of Homogeneous Material in **Appendix 1**).
- c) Benzidine and Benzidine Dihydrochloride are prohibited at any concentration if intentionally added for the Canadian market. Benzidine or its salts are prohibited above 0.01% for all other markets.



TABLE 1
SUBSTANCE RESTRICTIONS

Row Number	Substance (a)	Classification	GADSL (to be reported in IMDS)	Threshold (b)	Applications Affected	Effective Date
13	Asbestos	P	Yes	Not Detectable	All Products	Immediate
14	Amines,carcinogenic, which are formed from Azo-dyes	P	Yes	0.003% (30ppm) in textiles (virgin) or leather; 0.007% in recycled fibers (c)	Textiles and leather	Immediate
15	Amines, which can form carcinogenic Nitrosamines	D	Yes	0.1%	All Products	Immediate
16	Barium compounds (organic or water soluble)	D	Yes	1.0%	All Products	Immediate
17	Benzene	P	Yes	0.01%	All Products (except those listed below)	Immediate
17.1		D	Yes	0.1%	Fuel constituent	Immediate
18	Beryllium or its compounds	D	Yes	0.1%	All Products	Immediate

- a) All substances listed in Table 1 must be immediately declared if their current percent content by weight, per homogeneous material exceeds the stated threshold for future prohibition.
- b) Certain substances are subject to a specified upper threshold, stated as weight percent content in a material (see the definition of "Material" in **Appendix 1**). Suppliers must report content, if substances exceed the listed threshold percentage, by weight per homogeneous material (See definition of Homogeneous Material in Appendix 1).
- c) The threshold applies to cleaved amine content in materials. For recycled fibers, until 1 January 2005, the allowable threshold is 0.007%. EU Directive 76/769/EEC, 19th Amendment provides further technical guidance on which azodyes are affected.



TABLE 1
SUBSTANCE RESTRICTIONS

Row Number	Substance (a)	Classification	GADSL (to be reported in IMDS)	Threshold (b)	Applications Affected	Effective Date
19	Biocidal coatings / biocidal additives (also see Triorganotin compounds (trialkyl- and triaryltin compounds))	D	Yes	0.1%	All Products	Immediate
20	Brominated flame retardants Note: Separate Table 1 entries/classifications exist for the following members of this group: Polybrominated biphenyls [PBB] Polybrominated diphenyl ethers [PBDE], Tris(2,3-dibromopropyl)phosphate [TRIS]	D (see separate entries)	Yes (c)	0.1%	All Products	Immediate
20.1	Hexabromocyclododecane (HBCD)	D	Yes	0.1%	All Products	Immediate
20.2	Hexabromocyclododecane (HBCD)	P	Yes	0.1%	Vehicle interior fabric	1 July 2011
20.3	Tetrabromobisphenol A (TBBPA)	D	Yes	0.1%	All Products	Immediate
21	Butadiene (1,3 - Butadiene)	D	Yes	0.1%	All Products	Immediate
22	Butylphenol(2(2H-1,2,3-benzotriazol-2-yl)-4,6-di-tert)-	P	Yes	0.1%	UV Stabilizer in plastics	Immediate
23	Butylphenol, 2,4,6-tri-tert	D	Yes	0.1%	All Products	Immediate

- a) All substances listed in Table 1 must be immediately declared if their current percent content by weight, per homogeneous material exceeds the stated threshold for future prohibition.
- b) Certain substances are subject to a specified upper threshold, stated as weight percent content in a material (see the definition of "Material" in **Appendix 1**). Suppliers must report content, if substances exceed the listed threshold percentage, by weight per homogeneous material (See definition of Homogeneous Material in Appendix 1).
- c) PBB, PBDE and TRIS are GADSL listed



TABLE 1
SUBSTANCE RESTRICTIONS

Row Number	Substance (a)	Classification	GADSL (to be reported in IMDS)	Threshold (b)	Applications Affected	Effective Date
24	Cadmium or its compounds	P	Yes	0.01%	All applications except those listed below	Immediate
24.1		P	Yes	0.01%	Batteries for electric vehicles; except NiCd batteries used as replacement parts for vehicles put on the market before 31 Dec 2008	Prohibited after 31-Dec-08 (g)
24.2		D	Yes	0.01%	NiCd batteries used as replacement parts for vehicles put on the market before 31 Dec 2008. Applications with future effective dates for prohibitions are declarable.	Immediate
25	Carbon disulfide	D	No	0.1%	All Products	Immediate
26	Carcinogenic Substances	D	No	0.1%	All Products	Immediate
27	Canadian Chemical Challenge Program Substances (see link found in foot note (c) for CAS#)	D	Yes(d)	(e)	All Products	Immediate
28	Chlorinated Ethers (selected)					
28.1	Bis(Chloromethyl) ether (BCME)	P	Yes	(f)	All Products	Immediate
28.2	Chloromethyl methyl ether (CMME)	P	Yes	(f)	All Products	Immediate
28.3	NCC ether (f)	P	No	(f)	All Non-dimensional Products	Immediate

- a) All substances listed in Table 1 must be immediately declared if their current percent content by weight, per homogeneous material exceeds the stated threshold for future prohibition.
- b) Certain substances are subject to a specified upper threshold, stated as weight percent content in a material (see the definition of "Material" in **Appendix 1**). Suppliers must report content, if substances exceed the listed threshold percentage, by weight per homogeneous material (See definition of Homogeneous Material in **Appendix 1**).
- c) See http://www.chemicalsubstanceschimiques.gc.ca/challenge-defi/index_e.html 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, in finalized and proposed batches.
- d) Consistent with the Canadian Chemical Challenge regulations, Ford requires declaration at any concentration to all substances listed in **footnote-c 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 (c)**, 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.
- e) Declaration required if present at any concentration
- f) Prohibited if intentionally added at any concentration.
- g) CAS# 94097-88-8
- h) See **Section 3.2.7** for European components/vehicles. Suppliers should supply the new parts without the prohibited substance 6 months before this date.



TABLE 1
SUBSTANCE RESTRICTIONS

Row Number	Substance (a)	Classification	GADSL (to be reported in IMDS)	Threshold (b)	Applications Affected	Effective Date
29	Chlorinated hydrocarbons:					
29.1	Carbon tetrachloride (Tetrachloromethane)	P	Yes	0.1%	All Products	Immediate
29.2	1,1,2,2-Tetrachloroethane	P	No	0.1%	Diffuse applications, cleaning and/or products for sale to the general public in the European Union	Immediate
29.3	1,1,2,2-Tetrachloroethane	D	Yes	0.1%	All Products	Immediate
29.4	1,1,1,2-Tetrachloroethane	P	No	0.1%	Diffuse applications, cleaning and/or products for sale to the general public in the European Union	Immediate
29.5	1,1,1,2 Tetrachloroethane	D	Yes	0.1%	All Products	Immediate
29.6	Pentachloroethane	P	No	0.1%	Diffuse applications, cleaning and/or products for sale to the general public in the European Union	Immediate
29.7	Pentachloroethane	D	Yes	0.1%	All Products	Immediate
29.8	Pentachlorobenzene	P	Yes	(c)	All Products	Immediate
29.9	Tetrachlorobenzenes (TeCB)	P	Yes	(c)	All Products	Immediate
29.10	Trichlorobenzene	P	Yes	0.1%	All Products in the European Union	Immediate

- a) All substances listed in Table 1 must be immediately declared if their current percent content by weight, per homogeneous material exceeds the stated threshold for future prohibition.
- b) Certain substances are subject to a specified upper threshold, stated as weight percent content in a material (see the definition of "Material" in **Appendix 1**). Suppliers must report content if substances exceed the listed threshold percentage, by weight per homogeneous material (See definition of Homogeneous Material in **Appendix 1**).
- c) Prohibited if intentionally added at any concentration.



TABLE 1
SUBSTANCE RESTRICTIONS

Row Number	Substance (a)	Classification	GADSL (to be reported in IMDS)	Threshold (b)	Applications Affected	Effective Date
29.11	Trichloromethane (Chloroform)	P	No	0.1%	Diffuse applications, cleaning and/or products for sale to the general public in the European Union	Immediate
29.12	Trichloromethane (Chloroform)	D	Yes	0.1%	All Products	Immediate
29.13	1,1,2 Trichloroethane	P	No	0.1%	Diffuse applications, cleaning and/or products for sale to the general public in the European Union	Immediate
29.14	1,1,2 Trichloroethane	D	Yes	0.1%	All Products	Immediate
29.15	1,1 Dichloroethylene (Vinylidene chloride)	D	Yes	0.1%	All Products	Immediate
29.16	1,1 Dichloroethylene (Vinylidene chloride)	P	No	0.1%	Diffuse applications, cleaning and/or products for sale to the general public in the European Union	Immediate
29.17	1,1,1 Trichloroethane (Methyl chloroform)	P	Yes	0.1%	All Products	Immediate
29.18	Dichloromethane (Methylene chloride)	D	Yes	0.1%	All Products	Immediate
29.19	Trichloroethylene (Trichloroethene)	D	Yes	0.1%	All Products	Immediate
29.20	Tetrachloroethylene (Perchloroethylene)	D	Yes	0.1%	All Products	Immediate
30	Chlorinated or brominated Dioxins or Furans	P	Yes	Content above 10 ppb	All Products	Immediate
31	Chloroaniline	D	Yes	0.1%	All Products	Immediate

- a) All substances listed in Table 1 must be immediately declared if their current percent content by weight, per homogeneous material exceeds the stated threshold for future prohibition.
- b) Certain substances are subject to a specified upper threshold, stated as weight percent content in a material (see the definition of "Material" in **Appendix 1**). Suppliers must report content if substances exceed the listed threshold percentage, by weight per homogeneous material (See definition of Homogeneous Material in **Appendix 1**).



TABLE 1
SUBSTANCE RESTRICTIONS

Row Number	Substance (a)	Classification	GADSL (to be reported in IMDS)	Threshold (b)	Applications Affected	Effective Date
32	Chloroepoxypropane (1-Chloro-2,3-epoxy-propane)	D	Yes	0.1	All Products	Immediate
33	Chlorofluorocarbons (CFC's)	P	Yes	0.1%	All Products—except those below:	Immediate
33.1		D	No	0.1%	CFCs used to service existing equipment where legally permitted	Immediate
34	Chloroparaffins/Chlorinated Olefins (c)					
34.1	Short Chain Chloro paraffins/olefins, unbranched – (C10 to C13) (SCCPs)	P	Yes	0.10%	All Products	Immediate
34.2	Medium Chain Chloro paraffins/olefins, unbranched – (C14 to C17) (MCCPs)	D(d)	Yes	0.10%	All Products	Immediate
34.3	Long Chain Chloro paraffins/olefins, unbranched – (C18 to C28) (LCCPs)	D(d)	No	0.10%	Non-dimensional Products	Immediate
35	Chromium(VI)-salts (Cr+6; Hexavalent)	P	Yes	0.1% (e)	All Products	Immediate

- a) All substances listed in Table 1 must be immediately declared if their current percent content by weight, per homogeneous material exceeds the stated threshold for future prohibition.
- b) Certain substances are subject to a specified upper threshold, stated as weight percent content in a material (see the definition of "Material" in **Appendix 1**). Suppliers must report content if substances exceed the listed threshold percentage, by weight per homogeneous material (See definition of Homogeneous Material in **Appendix 1**).
- c) Full disclosure of non-dimensional materials within GMAP-e1291 of these substances **must be given using TSCA listed CAS#s**. Currently, in North America, Chemical Abstracts Service (CAS#s) listed in TSCA (<http://www.epa.gov/srs/>) are insufficient to distinguish between short, medium, and long chain length, and **only "generic" CAS#s are available, and MUST be used in GMAP-e1291 submittals**.
- d) In North America, various **feedstocks** used to create **chlorinated paraffins/olefins** are **known to contain short-chain length paraffins/olefins** resulting in the presence of **SCCPs** within the **MCCPs & LCCPs** upon chlorination. Hence, non-dimensional products containing medium & long-chain chloroparaffins/olefins require documentation that their presence do not cause exceedance of the **SCCP** threshold of **0.1%** by weight. **Sufficient documentation includes** the following if submitted via GMAP-e1291:
 - 1) **Product Name** (as shown on MSDS) of the **chlorinated paraffin/olefin** blended within the subject product, and **its weight percent** within the final product, and
 - 2) **full disclosure of the weight percent of each short-chain length paraffin/olefin within the feedstock** of the **chlorinated paraffin/olefin** in the final product.
- e) A maximum value of 0.1% by weight, of Hexavalent Chromium, per homogeneous material will be tolerated, (this percentage is based on the weight of the coating containing the Hexavalent Chromium, not the part weight).



TABLE 1
SUBSTANCE RESTRICTIONS

Row Number	Substance (a)	Classification	GADSL (to be reported in IMDS)	Threshold (b)	Applications Affected	Effective Date
36	Cobalt or its compounds	D	Yes	0.1%	Cobalt compounds and alloys, excluding cobalt in steels	Immediate
37	Colophony (Rosin)	D	Yes	0.1%	All Products	Immediate
38	Copper, metallic	D	Yes	0.1%	All Products	Immediate
39	Cyclohexane, hexachloro	D	Yes	0.1%	All Products	Immediate
40	Diamino-diphenyl-methane (4,4'-Diaminodi-phenylmethane)	P	Yes	0.1%	All Products	Immediate
41	Dichlorodiphenyltrichloroethane (DDT)	P	No	0.01%	All Products	Immediate
42	Dichloropropanol (1,3-Dichloro-2-propanol)	D	Yes	0.1%	All Products	Immediate
43	Diorganotin compounds (e.g. dialkyltin compounds)	D	Yes	0.1%	All Products	Immediate
44	Dodecachloropentacyclo1,3,4-Metheno-1H-cyclobuta(cd)pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro- decane (Mirex)	P	Yes	(c)	All Products	Immediate
45	Ecotoxic Substances	D	No	0.1%	All Products	Immediate
46	Ethanol, 2,2',2''-nitrilotris (Triethanolamine)	D	Yes	0.1%	Engine coolants	Immediate
47	Formaldehyde (Free)	D	Yes	0.001% (10 mg/kg)	Interior trim (by weight of finished parts)	Immediate
48	Glycols or their Acetates					
48.1	2-Methoxyethanol (2ME)	P	Yes	(c)	All Products	Immediate
48.2	2-Methoxyethanol within DEGME	P	Yes	≥ 0.5%	All Products	Immediate

- a) All substances listed in Table 1 must be immediately declared if their current percent content by weight, per homogeneous material exceeds the stated threshold for future prohibition.
- b) Certain substances are subject to a specified upper threshold, stated as weight percent content in a material (see the definition of "Material" in **Appendix 1**). Suppliers must report content, if substances exceed the listed threshold percentage, by weight per homogeneous material (See definition of Homogeneous Material in **Appendix 1**).
- c) Prohibited if intentionally added at any concentration.



TABLE 1
SUBSTANCE RESTRICTIONS

Row Number	Substance (a)	Classification	GADSL (to be reported in IMDS)	Threshold (b)	Applications Affected	Effective Date
48.3	2-Methoxyethyl acetate	D	Yes	0.1%	All Products	Immediate
48.4	2-Ethoxyethanol	D	Yes	0.1%	All Products	Immediate
48.5	2-Ethoxyethyl acetate	D	Yes	0.1%	All Products	Immediate
49	2-Butoxyethanol	D	Yes	0.01% (d)	All Products	Immediate
50	2-(2-Butoxyethoxy)ethanol (DEGBE)	D	Yes	0.1%	All Products	Immediate
51	Halons	P	Yes	0.1%	All Products	Immediate
52	Hexachlorobenzene (HCB)	P	Yes	20ppb	All Products	Immediate
52.1		D	Yes	10 ppb	All Products	Immediate
53	Hexachloro-1,3-butadiene (HCBd)	P	Yes	(c)	All Products	Immediate

- a) All substances listed in Table 1 must be immediately declared if their current percent content by weight, per homogeneous material exceeds the stated threshold for future prohibition.
- b) Certain substances are subject to a specified upper threshold, stated as weight percent content in a material (see the definition of "Material" in **Appendix 1**). Suppliers must report content, if substances exceed the listed threshold percentage, by weight per homogeneous material (See definition of Homogeneous Material in **Appendix 1**).
- c) Prohibited if intentionally added at any concentration.
- d) Exceedance to threshold limits for select products requires permits, see: http://www.ec.gc.ca/CEPARegistry/documents/regs/g2-14026_r1.pdf



TABLE 1
SUBSTANCE RESTRICTIONS

Row Number	Substance (a)	Classification	GADSL (to be reported in IMDS)	Threshold (b)	Applications Affected	Effective Date
54	Hexamines (See Polyamine Curing Agents)					
55	Hydrazine	D	Yes	0.1%	All Products	Immediate
56	n-Hexane	D	No	0.1%	All Products	Immediate
57	Hydrobromofluorocarbons (HBFC's)	P	Yes	NA (c)	All Products	Immediate
58	Hydrochlorofluorocarbons (HCFC's)	P	Yes	NA (c)	Solvents, blowing agents and all vehicle applications, except for servicing vehicles produced prior to December 2001 (where legally permitted)	Immediate
58.1		D	No	NA (c)	All <u>other</u> products containing or manufactured using HCFCs	Immediate
59	Hydrofluorocarbons (HFC's)	P	Yes	NA (c)	All vehicle-related applications except for refrigerants	Immediate
59.1		D	Yes	NA (c)	All vehicle-related refrigerants	Immediate
59.2		D	No	NA (c)	Non-vehicle related products	Immediate
60	Hydrogen Sulfide	D	No	0.1%	All Products	Immediate

- a) All substances listed in Table 1 must be immediately declared if their current percent content by weight, per homogeneous material exceeds the stated threshold for future prohibition.
- b) Certain substances are subject to a specified upper threshold, stated as weight percent content in a material (see the definition of "Material" in **Appendix 1**). Suppliers must report content, if substances exceed the listed threshold percentage, weight per homogeneous material (See definition of Homogeneous Material in **Appendix 1**).
- c) NA = Not Applicable



TABLE 1
SUBSTANCE RESTRICTIONS

Row Number	Substance (a)	Classification	GADSL (to be reported in IMDS)	Threshold (b)	Applications Affected	Effective Date
61	Lead or its compounds	P	Yes	0.1%	All products except vehicle and facility applications separately listed below (e):	Immediate
61.1		P	Yes	0.35%	Steel, for machining purposes and galvanized steel	Immediate
61.2		P	Yes	0.4%	Aluminum, for machining Purposes (e)	Immediate
61.3		P	Yes	0.1%	Bearing shells and bushings in engines, transmissions and air conditioning compressors (e)	Prohibited after 30 June 2011 (d)
61.4		P	Yes	4.0%	Copper alloys	Immediate
61.5		D	Yes	0.1%	Electrical components which contain lead in a glass or ceramic matrix compound, except glass in bulbs and glaze of spark plugs (c)	Immediate

- a) All substances listed in Table 1 must be immediately declared if their current percent content by weight, per homogeneous material exceeds the stated threshold for future prohibition.
- b) Certain substances are subject to a specified upper threshold, stated as weight percent content in a material (see the definition of "Material" in **Appendix 1**). Suppliers must report content, if substances exceed the listed threshold percentage, by weight per homogeneous material (See definition of Homogeneous Material in **Appendix 1**).
- c) Components must be identified for dismantling, if the average per vehicle lead content exceeds 60 grams for all lead in solder and electronic circuit boards, electrical components that contain lead in a glass or ceramic matrix compound (except bulbs and spark plugs) and all other electric applications.
- d) See **Section 3.2.7** for European components/vehicles. Suppliers should supply the new parts without the prohibited substance 6 months before this date.
- e) See **Section 4.4** for Spare Parts



TABLE 1
SUBSTANCE RESTRICTIONS

Row Number	Substance (a)	Classification	GADSL (to be reported in IMDS)	Threshold (b)	Applications Affected	Effective Date
61.6		P	Yes	0.1%	Wheel balance weights in regions other than those following the EU ELV Directive, Japan and North America	1-Jan-2010
61.7		P	Yes	0.5%	Bonding agents for elastomers in powertrain applications (e)	Prohibited after 30 June 2009 (d)
61.8		P	Yes	0.1%	Carbon brushes in electric motors in regions other than those following the EU ELV Directive, Japan and North America	1-Jan-2010
61.9		P	Yes	0.1%	Copper in friction materials of brake linings for vehicles in regions following the EU ELV Directive, Japan and North America (c)	Immediate
61.10		P	Yes	0.1%	Copper in friction materials of brake linings in regions other than those following the EU ELV Directive, Japan and North America	1-Jan-2010

- a) All substances listed in Table 1 must be immediately declared if their current percent content by weight, per homogeneous material exceeds the stated threshold for future prohibition.
- b) Certain substances are subject to a specified upper threshold, stated as weight percent content in a material (see the definition of "Material" in **Appendix 1**). Suppliers must report content, if substances exceed the listed threshold percentage, by weight per homogeneous material (See definition of Homogeneous Material in **Appendix 1**).
- c) Components must be made identifiable for pre-treatment.
- d) See **Section 3.2.7** for European components/vehicles. Suppliers should supply the new parts without the prohibited substance 6 months before this date.
- e) See **Section 4.4** for Spare Parts



TABLE 1
SUBSTANCE RESTRICTIONS

Row Number	Substance (a)	Classification	GADSL (to be reported in IMDS)	Threshold (b)	Applications Affected	Effective Date
61.11		P	Yes	0.1%	Valve seats for engine types developed after 30 June 2003	Immediate
61.12		P	Yes	0.1%	Pyrotechnic initiators for vehicles type approved in regions following the EU ELV Directive & Japan after 30 June 2006 and replacement initiators for these vehicles.(i)	Prohibited if type approved after 30-Jun-06 (h)
61.13		D	Yes	0.1%	All Products (f), including vehicle batteries(d); vibration dampers mounted to body or chassis (d/e); absorption refrigerators in motor homes or counter weights for facility based equipment	Immediate
61.14		P	Yes	0.1%	Lead solder in electronic circuit boards and other electronic applications incl. glass) (d/g)(i)	Prohibited if type approved after 31 Dec 2010 (h)
62	Mercury or its compounds (c)	P	Yes	0.1%	All applications except those listed below	Immediate

- a) All substances listed in Table 1 must be immediately reported if their current percent content by weight, per homogeneous material exceeds the stated threshold for future prohibition.
- b) Certain substances are subject to a specified upper threshold, stated as weight percent content in a material (see the definition of "Material" in **Appendix 1**). Suppliers must report content, if substances exceed the listed threshold percentage, by weight per homogeneous material (See definition of Homogeneous Material in **Appendix 1**).
- c) Vehicles containing Mercury components must offer mercury-free vehicle derivatives.
- d) Components must be identified for dismantling, if the average per vehicle lead content exceeds 60 grams for **all lead in solder and** electronic circuit boards, electrical components that contain lead in a glass or ceramic matrix compound (except bulbs and spark plugs) and all other electric applications.
- e) The lead exemption for vibration dampers is meant as a temporary design fix for vibration issues encountered late in new program development. These dampers are expected to be designed out as soon as **practicable**.
- f) Also, applications with future effective dates for prohibitions are declarable.
- g) Revision pending to postpone some applications of the lead in solder prohibition.
- h) See Section 3.2.7 for European components/vehicles. Suppliers should supply the new parts without the prohibited substance 6 months before this date.
- i) See Section 4.4 for Spare Parts



**TABLE 1
SUBSTANCE RESTRICTIONS**

Row Number	Substance (a)	Classification	GADSL (to be reported in IMDS)	Threshold (b)	Applications Affected	Effective Date
62.1		P	Yes	0.1%	High intensity Discharge Lamps (c)	Prohibited for scalability UP3-UP6 program launches(e)
62.2		D	Yes	0.1%	Discharge lamps for headlight applications and fluorescent tubes used in instrument panel displays (c)	Immediate
62.3		P	Yes	0.1%	Fluorescent tubes used in instrument panel displays	Prohibited if type approved after 30 June 2012 (f)
63	Methanol	D	Yes	0.1%	All Products	Immediate
64	Methylacrylamidomethoxy-acetate	D	Yes	0.1%	All Products	Immediate
65	Methyl bromide (See Halons)					
66	Mineral fibers (Natural or Synthetic) except Continuous Filament Fibers	D	Yes	(d)	All Products	Immediate
66.1	Ceramic fibers	D	Yes	0.1%	All Products	Immediate

- a) All substances listed in Table 1 must be immediately declared if their current percent content by weight, per homogeneous material exceeds the stated threshold for future prohibition.
- b) Certain substances are subject to a specified upper threshold, stated as weight percent content in a material (see the definition of "Material" in **Appendix 1**). Suppliers must report content, if substances exceed the listed threshold percentage, by weight per homogeneous material (See definition of Homogeneous Material in **Appendix 1**).
- c) Components must be made identifiable for pre-treatment.
- d) See **Appendix 1**, definition for FIBER
- e) Annex II of the E.U. ELV Directive also prohibits mercury in discharge lamps for headlight applications if type approved after 30 June 2012.
- f) See **Section 3.2.7** for European components/vehicles. Suppliers should supply the new parts without the prohibited substance, 6 months before this date.



TABLE 1
SUBSTANCE RESTRICTIONS

Row Number	Substance (a)	Classification	GADSL (to be reported in IMDS)	Threshold (b)	Applications Affected	Effective Date
67	Monomethyldibromodiphenylmethane	D	Yes	0.1%	All Products	Immediate
68	Monomethyldichlorodiphenylmethane	D	Yes	0.1%	All Products	Immediate
69	Monomethyltetrachlorodiphenylmethane	D	Yes	0.1%	All Products	Immediate
70	Mutagenic substances	D	No	0.1%	All Products	Immediate
71	N,N-Dimethylformamide	D	Yes	0.1%	All Products	Immediate
72	N,N'-ditolyl-p-phenylenediamine	D	Yes	0.1%	All Products	Immediate
73	N,N'-dixylyl-p-phenylenediamine	D	Yes	0.1%	All Products	Immediate
74	Naphthalene	D	Yes	0.1%	All Products	Immediate
75	Nickel or its compounds	D	Yes	0.1%	All products, except stainless steels and alloys containing metallic nickel	Immediate
75.1		D	Yes	0.5 $\mu\text{g}/\text{cm}^2/\text{week}$ (Ni release rate threshold)	Component surfaces likely to be routinely touched, e.g., handles and buckles (release rate as determined by test method BSEN1811:1999) (c). Phosphated surfaces are exempted	Immediate

- a) All substances listed in Table 1 must be immediately declared if their current percent content by weight, per homogeneous material exceeds the stated threshold for future prohibition.
- b) Certain substances are subject to a specified upper threshold, stated as weight percent content in a material (see the definition of "Material" in **Appendix 1**). Suppliers must report content, if substances exceed the listed threshold percentage, by weight per homogeneous material (See definition of Homogeneous Material in **Appendix 1**).
- c) Test Method BSEN1811 can be accessed at <http://www.cenorm.be/>



TABLE 1
SUBSTANCE RESTRICTIONS

Row Number	Substance (a)	Classification	GADSL (to be reported in IMDS)	Threshold (b)	Applications Affected	Effective Date
76	Nitrites	D	Yes	0.1%	Additives in engine coolants, vulcanizing agents in rubber products, anticorrosion surface additive.	Immediate
77	N-Nitrosoamines/N-Nitrosoamides	P	Yes	0.1% (c)	All Products	Immediate
77.1		P	No	Not Detectable	Metalworking fluids containing mixtures of nitrites and amines/ amides that may form N-Nitrosoamines/ N-Nitrosoamides	Immediate
78	N-Nitrosodimethylamine	P	Yes	(d)	All Products	Immediate
79	N-tolyl-N'-xylyl-p-phenylenediamine	D	Yes	0.1%	All Products	Immediate
80	Organotin compounds (see Diorganotins and Triorganotins)					
81	Ozone depleting substances (see definition in Appendix 1)					
82	Pentachlorophenol (PCP) or its salts	P	Yes	0.0005% (5 ppm)	All Products	Immediate
83	Perchlorates	D	Yes	0.1%	All Products	Immediate

- a) All substances listed in Table 1 must be immediately declared if their current percent content by weight, per homogeneous material exceeds the stated threshold for future prohibitions.
- b) Certain substances are subject to a specified upper threshold, stated as weight percent content in a material (see the definition of "Material" in **Appendix 1**). Suppliers must report content, if substances exceed the listed threshold percentage, by weight per homogeneous material (See definition of Homogeneous Material in **Appendix 1**).
- c) Residual N-Nitrosoamines/N-Nitrosoamides in cured polymeric articles need not be reported, nor will be subject to, the Prohibition at less than or equal to the stated threshold of 0.1 %, which is considered to reflect the aggregate mass percent of all carcinogenic N-Nitrosoamines/N-Nitrosoamides present.
- d) Prohibited if intentionally added at any concentration.



TABLE 1
SUBSTANCE RESTRICTIONS

Row Number	Substance (a)	Classification	GADSL (to be reported in IMDS)	Threshold (b)	Applications Affected	Effective Date
84	Perfluoroalkyl compounds, includes: Perfluoroalkyl sulfonates e.g., PFAS, fluorotelomers, and telomere-based polymeric substances	D	Yes	0.005% (c) 0.1% (d) 1µg/m ² (e)	All Products	Immediate
84.1	PFOA and its salts, Perfluoro-ocatanoic acids C8F15O2X (X=H, NH4, and Metal salts)	D	Yes	0.1% by mass in components made from fluoropolymers	All Products	Immediate
84.2	PFOA and its salts, Perfluoro-ocatanoic acids C8F15O2X (X=H, NH4, and Metal salts)	P	No	0.005% (c)	All non-dimensional products made with specified Fluorotelomer-based Substances	Immediate
84.3	Perfluorooctane sulfonates C8F17SO2X (X=OH, Metal salt, halide, amide and other derivatives including polymers)	P	Yes	0.005% (c) 0.1% (d) 1µg/m ² (e)	All Products	Immediate
85	Phenol	D	Yes	0.1%	All Products	Immediate
86	Phenylenediamines or its salts	D	Yes	0.1%	All Products	Immediate
87	Phthalates	D	Yes	0.1%	All Products	Immediate

- a) All substances listed in Table 1 must be immediately declared if their current percent content by weight, per homogeneous material exceeds the stated threshold for future prohibition.
- b) Certain substances are subject to a specified upper threshold, stated as weight percent content in a material (see the definition of "Material" in **Appendix 1**). Suppliers must report content, if substances exceed the listed threshold percentage, by weight per homogeneous material (See definition of Homogeneous Material in **Appendix 1**).
- c) For Chemical preparations
- d) For semi-finished products
- e) For coated material



TABLE 1
SUBSTANCE RESTRICTIONS

Row Number	Substance (a)	Classification	GADSL (to be reported in IMDS)	Threshold (b)	Applications Affected	Effective Date
88	Polyamine Curing Agents (includes Hexamines)	D	Yes	0.1%	Interior trim (by weight of finished parts)	Immediate
89	Polycyclic aromatic hydrocarbons (PAH; PCAH)	D	Yes	See individual thresholds (e)	Vehicle-related parts	Immediate
89.1		P	Yes	3% (total PAH content per basestock as quantified by IP 346) (c)	Petroleum mineral oil basestocks in lubricants	Immediate
89.2		P	Yes	1mg/kg BaP 10mg/kg total of (d)	Tires for EU Markets	1 Jan 2010
90	Polybrominated biphenyls (PBB)	P	Yes	0.001%	All Products	Immediate
91	Polybrominated diphenyl ethers (PBDE)					
91.1	Decabromodiphenyloxi	P	Yes	0.1%	All Products	1 July 2011
91.2	Decabromodiphenyloxi	D	Yes	0.1%	All Products	Immediate
91.3	Pentabromodiphenyloxi	P	Yes	0.1%	All Products	Immediate
91.4	Octabromodiphenyloxi	P	Yes	0.1%	All Products	Immediate
92	Polybrominated Terphenyls (PBT)	D	Yes	0.001%	All Products	Immediate

- a) All substances listed in Table 1 must be immediately declared if their current percent content by weight, per homogeneous material exceeds the stated threshold for future prohibition.
- b) Certain substances are subject to a specified upper threshold, stated as weight percent content in a material (see the definition of "Material" in **Appendix 1**). Suppliers must report content, if substances exceed the listed threshold percentage, by weight per homogeneous material (See definition of Homogeneous Material in **Appendix 1**).
- c) Institute of Petroleum test method for PAH content can be found at <http://www.energyinst.org.uk/>
- d) The PAH's to be reported are identified under PAH definition in **Appendix 1**.
- e) See GADSL, Reference List, available as a downloadable file at <http://www.gadsl.org> and in the "News" section of IMDS at, http://www.mdssystem.de/html/en/home_en.htm.



TABLE 1
SUBSTANCE RESTRICTIONS

Row Number	Substance (a)	Classification	GADSL (to be reported in IMDS)	Threshold (b)	Applications Affected	Effective Date
93	Polychlorinated Biphenyls (PCB)	P	Yes	Not Detectable(d)	All Products	Immediate
94	Polychlorinated Naphthalenes	D	Yes	0.1%	All Products	Immediate
95	Polychlorinated Terphenyls (PCT)	P	Yes	0.001%	All Products	Immediate
96	Products of Endangered Species	P	Refer to Section 3.1.8	Not Detectable	All Products	Immediate
97	Pyrotechnical compounds	D	Yes	0.1%	Air Bags, Seat belt pretensioners, etc.	Immediate
97.1	Ammonium Perchlorate	D	Yes	0.1%	Pyrotechnical Compound	Immediate
97.2	Nitrocellulose	D	Yes	0.1%	Pyrotechnical Compound	Immediate
97.3	Sodium Azide	D	Yes	0.1%	Pyrotechnical Compound	Immediate
98	Radioactive substances (including scrap metal contaminants)	P	No (see section 3.1.11)	(c)	All Products	Immediate
99	Reproductive toxicants	D	No	0.1%	All Products	Immediate
100	Selenium and its compounds	D	Yes	0.1%	All Products	Immediate
101	Sensitizing substances	D	No	0.1%	All Products	Immediate
102	Silica, Crystalline	D	Yes	(e)	All Products	Immediate
103	Styrene (Vinyl benzene)	D	Yes	0.1%	All Products	Immediate
104	Styrene oxide (Epoxy styrene)	D	Yes	0.1%	All Products	Immediate

- a) All substances listed in Table 1 must be immediately declared if their current percent content by weight, per homogeneous material exceeds the stated threshold for future prohibition.
- b) Certain substances are subject to a specified upper threshold, stated as weight percent content in a material (see the definition of "Material" in **Appendix 1**). Suppliers must report content, if substances exceed the listed threshold percentage, by weight per homogeneous material (See definition of Homogeneous Material in **Appendix 1**).
- c) 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 3.1.11). Radioactive sources used in manufacturing processes are exempted.
- d) Per SW-846 Method 8082; samples must be ground and composited by contract laboratory so that a representative sub-sample(s) is used for analysis; only heated soxhlet solvent extraction shall be used; lowest achievable MDL are expected; highest acceptable MDL must not exceed most stringent US State/Local requirement – currently 490ppb – this must be affirmed at time of testing.) Matrix dependent alternate method will be considered by Ford.
For concrete recycling, this method must be coupled with representative sampling methods specified in EQO Memorandum EQR05-047_US .
- e) Any intentionally introduced content must be reported



TABLE 1
SUBSTANCE RESTRICTIONS

Row Number	Substance (a)	Classification	GADSL (to be reported in IMDS)	Threshold (b)	Applications Affected	Effective Date
105	SVHC's (Substances of Very High Concern according to REACH (d))	D	Yes	0.1%	All Products	Immediate
106	Sulfur Hexafluoride	P	Yes	NA (c)	Vehicle applications	Immediate
106.1		P	No	NA (c)	Processing (casting) of Magnesium	Immediate
106.2		D	No	NA (c)	Closed systems (a system that is normally hermetically closed), e.g., electrical installations	Immediate
107	Tetrafluoromethane	P	Yes	0.1%	All Products	Immediate
108	Thallium or it's compounds	D	Yes	0.1%	All Products	Immediate
109	Thioperoxydicarbonic diamide (([H2N)C(S)]2S2), tetramethyl- ("Thiram")	D	Yes	0.1%	All Products	Immediate
110	Toluene	D	Yes	0.1%	All Products	Immediate
110.1		P	No	0.1%	Adhesives and spray paints intended for sale to the general public in the European Union	Immediate
110.2	o-Toluidine generating substances	D	Yes	0.1%	All Products	Immediate
111	Tris(2-chloroethyl)phosphate	D	Yes	0.1%	All Products	Immediate
112	Trichlorophenol or its salts	D	Yes	0.1%	All Products	Immediate
113	Trichloropropane (1,2,3 - Trichloropropane)	D	Yes	0.1%	All Products	Immediate

- a) All substances listed in Table 1 must be immediately declared if their current percent content by weight, per homogeneous material exceeds the stated threshold for future prohibition.
- b) Certain substances are subject to a specified upper threshold, stated as weight percent content in a material (see the definition of "Material" in **Appendix 1**). Suppliers must report content, if substances exceed the listed threshold percentage, by weight per homogeneous material (See definition of Homogeneous Material in **Appendix 1**).
- c) Not Applicable
- d) See <http://echa.europa.eu/> or http://echa.europa.eu/chem_data_en.asp for more information



TABLE 1
SUBSTANCE RESTRICTIONS

Row Number	Substance (a)	Classification	GADSL (to be reported in IMDS)	Threshold (b)	Applications Affected	Effective Date
114	Trimethylphosphate	D	Yes	0.1%	All Products	Immediate
115	Triorganotin compounds (trialkyl- and triaryltin compounds)	P	Yes	0.01%	Vehicle related parts, e.g., those with incorporated biocides	Immediate
115.1		D	No	0.05%	All products other than vehicle related parts	Immediate
116	Triphenylphosphate	D	Yes	0.1%	All Products	Immediate
117	Tris-(1-aziridiny) phosphine oxide	P	Yes	0.1%	All Products	Immediate
118	Tris(2,3-dibromopropyl)phosphate [TRIS]	P	Yes	0.1%	All Products	Immediate
119	Vinyl chloride	P	Yes	0.0005% (5 ppm as monomer)	All Products	Immediate

- a) All substances listed in Table 1 must be immediately declared if their current percent content by weight, per homogeneous material exceeds the stated threshold for future prohibition.
- b) Certain substances are subject to a specified upper threshold, stated as weight percent content in a material (see the definition of "Material" in **Appendix 1**). Suppliers must report content, if substances exceed the listed threshold percentage, by weight per homogeneous material (See definition of Homogeneous Material in **Appendix 1**).



APPENDIX 1 DEFINITIONS

ACKNOWLEDGMENT:

Ford Motor Company will provide electronic acknowledgment(s) to the submitter:

- 1) verifying receipt of the suppliers' submission(s) to IMDS and GMAP-e1291 (where applicable)
- 2) compliance or non-compliance of the data therein to the WSS-M99P9999-A1,
- 3) and receipt of their certification of compliance with WSS-M99P9999-A1.

ARTICLE:

Under the definition provided by the US Occupational Safety and Health Administration (OSHA), "Article" means a manufactured item other than a fluid or particle:

- 1) which is formed to a specific shape or design during manufacture,
- 2) which has end use function(s) dependent in whole or in part upon its shape or design during end use, and
- 3) 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 the code of Federal Regulation of section 29CFR 1910.1200), and does not pose a physical hazard or health risk.

BIOCIDES:

Additives intended to prevent or restrict microbiological growth.

CARCINOGENS:

Including:

- 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 carcinogen listed by the Deutsche Forschungs Gemeinschaft (DFG) in the latest edition of their Maximale Arbeitsplatz Konzentration (MAK) list in Categories 1-2 and 3-5 (as listed in the Ford Restricted Substance List)
- 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")
- 7) substances classified as Category 1 or 2 carcinogens under the provisions of the European EC Directives on the Classification, Packaging and Labeling of Dangerous Substances and Dangerous Preparations (EC Council Directive 67/548/EC3).



APPENDIX 1 (Cont'd) DEFINITIONS

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.

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. All RSMS listed substances which are intentionally added, must be reported in IMDS. For the purpose of this standard, monomers, catalysts, and accelerators remaining in cured polymeric articles (including paints) as residual content **are 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.

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 Directives on the Classification, Packaging and Labeling of Dangerous Substances and Dangerous Preparations, and as classified by ASTM STP 1179, p.34, 1993.

ENDANGERED SPECIES (PRODUCTS OF):

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) UNEP-WCMC Species Database <http://sea.unep-wcmc.org/species/dbases/about.cfm>.

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)



APPENDIX 1 (Cont'd) DEFINITIONS

EU ELV (End of Life Vehicle) Directive:

European Union Directive 2000/53/EC on ELV's
http://eur-lex.europa.eu/pri/en/oj/dat/2000/l_269/l_26920001021en00340042.pdf

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.

GMAP – e1291 SYSTEM:

The Global Materials Approval Process-e1291 System is a single, web-based tool that is used by suppliers to submit non-dimensional material compositions, associated regulatory data, hazardous materials/dangerous goods transportation information, and applicable MSDSs (in the required languages, designated by the requester of the product and indicated with an asterisk) to Ford Motor Company. The GMAP-e1291 system also allows suppliers to check the status of materials processed through the GMAP-e1291 System and update materials information [<https://web.emmg.ford.com/e1291/menu/>].

HAZARDOUS:

Hazardous substances/materials are those that have the capacity of producing injury or illness through ingestion, inhalation, or absorption through any body surface, or creating an adverse effect upon the environment.

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.



APPENDIX 1 (Cont'd) DEFINITIONS

GLOBAL AUTOMOTIVE DECLARABLE SUBSTANCE LIST (GADSL):

This is a common list of substances agreed by all of the automobile manufacturers that subscribe to IMDS. The purpose of this list is to commonize the reporting requirements for all users of IMDS (<http://www.gadsl.org>).

MACHINING:

Material formed and shaped by a tool.

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.

MATERIAL, DIMENSIONAL:

Dimensional items are those having their own shape and are essentially solid. Most are considered "articles" (See definition of "Article")

MATERIAL, NON-DIMENSIONAL:

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

MATERIAL, NON-PRODUCTION:

Non-production materials are those materials used in Ford facilities which do not remain on products marketed by Ford.

MATERIAL, POST-PRODUCTION:

Post-production materials are those materials used to service a vehicle after it exits the assembly plant.

MATERIAL, PRODUCTION:

Production materials are those materials used for the fabrication of production parts, complete vehicles, or other materials that remain on products marketed by Ford.



**APPENDIX 1 (Cont'd)
DEFINITIONS**

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 classified as Category 1, 2 or 3 mutagens under the provisions of the EC Directives on the Classification, Packaging and Labeling of Dangerous Substances and Dangerous Preparations.

NEW PRODUCTION PARTS:

Newly drawn parts that are not in current production or carried over from another vehicle
Parts 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-2037/2000/EC, chemicals are collectively identified as ozone depleting substances (ODSs) and include CFCs (chlorofluorocarbons), HCFCs (hydrochlorofluorocarbons) and several brominated-carbons including Halons. The following RSMS Chemical Groupings and Categories should identify all ODSs (from Table 1):

(29.1)	Chlorinated hydrocarbons (carbon tetrachloride)
(2917)	Chlorinated hydrocarbons (methyl chloroform)
(33)	Chlorofluorocarbons (CFC's)
(51)	Halons
(57)	Hydrobromofluorocarbons (HBFC's)
(58 & 58.1)	Hydrochlorofluorocarbons (HCFC's)

PAH (Polycyclic-aromatic hydrocarbons):

Regulations prohibiting the use of PAH extender oils in tires (Directive 2005/69/EC, for EU markets) from January 1, 2010 require the sum of the following 8 PAH's NOT to exceed 10mg/kg:

Benzo(a)pyrene CAS # 50-32-8 (individual concentration not to exceed 1 mg/kg)

Benzo(e)Pyrene CAS # 192-97-2

Benzo(ah)anthracene CAS # 56-55-3

Chrysene CAS # 218-01-9

Benzo(b)fluoranthene CAS # 205-99-2

Benzo(j)fluoranthene CAS # 205-82-3

Benzo(k)fluoranthene CAS # 207-08-9

Dibenzo(ah)anthracene CAS # 53-70-3

These limits are regarded as kept, if the PAH extract is <3% by mass, as measured by the Institute of Petroleum standard IP346.

*In the case of for extender oils in tires only, if the 3% threshold is exceeded, then the individual PAH's listed above, **must** be reported. For all other applications, if the 3% threshold is exceeded, the material is prohibited.*



**APPENDIX 1 (Cont'd)
DEFINITIONS**

PERCENT (%) BY WEIGHT:

Unless otherwise stated, the ratio of the masses of the individual substance and material (see definition of "Material" above) containing the substance multiplied by 100.

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

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) (http://ec.europa.eu/echa/home_en.html) the new EU regulation on chemicals and other substances (including metals) entered into force on 1 June 2007. This legislation rationalizes the current EU regulatory system for chemicals and will replace over 40 pieces of existing legislation. The existing EU restrictions regime and safety data sheets system will be carried forward with some amendments. REACH also introduces a new registration requirement covering all substances supplied above 1 tonne (metric) per year, and a new authorization requirement covering substances of very high concern (e.g. carcinogens, persistent substances). A manufacturer or importer will need to register with the EU Chemical Agency, any substance they supply to the EU market above 1 tonne (metric) per manufacturer per year (also see: <http://ecb.jrc.it/reach/>).



APPENDIX 1 (Cont'd) DEFINITIONS

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.

Reporting of recycled content:

- Only the weight of the recyclate within the component or assembly should be reported. Do not report the component or assembly weight as recycled content. This weight is reported and totaled separately.
- For PCR only, suppliers do not have to report "Declarable" substances unless otherwise specified, although suppliers must report any substances that are listed in this Standard as "Prohibited" or "Prohibited above threshold".

REPORTING PERIOD:

The period of time between each annual release of the Restricted Substance Management Standard (RSMS), WSS-M99P9999-A1

REPRODUCTIVE TOXICANTS:

Substances 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").
- 2) Substances classified as Category 1, 2 or 3 due to adverse effects on fertility, or their developmental toxicity under the provisions of the EC Directives on the Classification, Packaging and Labeling of Dangerous Substances and Dangerous Preparations.

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)).



APPENDIX 1 (Cont'd) DEFINITIONS

SENSITIZERS (cont):

- 3) Are classified as inhalation or contact sensitizers under the provisions of the EC Directives on the Classification, Packaging and Labeling of Dangerous Substances and Dangerous Preparations
- 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.

SERVICE UNIQUE PARTS:

- 1) Those parts sold and released by FCSD, 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.).

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:

$$\bar{x} = 1/n (x_1 + \dots + x_n),$$

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

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 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. "



**APPENDIX 2
FORD INFORMATION CONTACTS**

TOXICOLOGY/OCCUPATIONAL HYGIENE

Ford European Toxicology Group
GB-1/165
Ford Motor Company Ltd.
Central Office, Eagle Way
Warley, Essex CM13 3BW
England
Telephone: 44-(0) 1277-251485
Fax: 44-(0) 1277-253066

Ford North American Toxicology Group
Ford Motor Company
World Headquarters, 0531
One American Road
Dearborn, MI 48126
U.S.A.
Telephone: 1-(313) 594-6957
Fax: 1-(313) 248-2583

Safety Department
Ford Motor Company of Australia Ltd.
Cnr. Princes Highway and North
Shore Road
Norlane, Victoria
Australia
Telephone: 61-(52) 795 130
Fax: 61-(52) 795 125

Environmental Department 91710 PVÖS 21
Vehicle Engineering
Volvo Car Corporation
SE-405 31 Göteborg
Sweden
Telephone: 46-31-3258771
Email: jlundst2@volvocars.com

Hazardous Materials and Toxicology
Ford Motor Company for South America
Sao Paulo, Brazil
Telephone: 55-11-4174-8229 or 8193
Fax: 55-11-4174-9872

Material Handling Safety and Compliance Office
Ford Asia Pacific
Ford Lio Ho Motor Co., Ltd.
705 Chung Hwa Rd. Sec. 1
Chung Li, Taoyuan, 320
Taiwan, R.O.C.
Telephone: 886-3-4530829
Fax: 886-3-4635004

ENVIRONMENTAL

Environmental Quality Office, Europe
Ford Werke GmbH
D-NL/A1
Henry Ford Strasse 1
50725 Cologne
Germany
Telephone: 49-221-90136319
Fax: 49-221-9012919

Environmental Quality Office
Ford Motor Company
290 Town Center Dr. Suite 800
Fairlane Plaza North
Dearborn, MI 48126
USA
Telephone: 1-(313) 322-1226
Fax: 1-(313) 248-5030



**APPENDIX 2
FORD INFORMATION CONTACTS**

Environmental Department, 91710, PVÖS 21
Vehicle Engineering
Volvo Car Corporation
SE-405 31 Göteborg
Sweden
Telephone: 46-31-3258771
Email: jlundst2@volvocars.com

Environmental Quality Office
Ford of Mexico
Mexico General Office Building
8300
Paseo de Reforma No. 333
Mexico City, D.F.
Mexico 5
Telephone: 52-5-3266252
Fax: 52-5-3266383

Environmental Quality Office Asia Pacific
Ford Motor Company of Australia Limited Head Office
1735 Sydney Road
Campbellfield Victoria 3061
Australia
Telephone: 61-39359 8976
Fax: 61-39359 8949

Environmental Quality Office, Latin America
Ford Motor Company SA de CV
Guillermo Gonzalez Camarena No. 1500
Mexico City, D.F. 01210 Mexico
Telephone: 52-55-11033825
Telephone: 52-55-11033857

MATERIALS ENGINEERING

Materials Engineering and Testing
Materials Technology Centre GB-15/GM
Ford Motor Company Ltd.
Research & Engineering Center
Laindon, Basildon
Essex SS15 6EE
U.K.
Telephone: 44-(0) 1268-40-3377
Email: aharris6@ford.com

Global Materials &
Standards Engineering
Ford Motor Company
15000 Century Drive

Dearborn, MI 48120-1267
U.S.A.
Telephone: 1-(313) 805-4888
Fax: 1-(313) 322-1614

Materials Engineering
Products Engineering Office
Ford Motor Co. of Australia Ltd.
1727 Sydney Road, Broadmeadows
Victoria 3061
Australia
Telephone: 61-(3) 93-597-264



APPENDIX 2 FORD INFORMATION CONTACTS

Materials Engineering
Jaguar Cars & Land Rover
Jaguar Engineering Centre
W/1/040
Coventry CV3 4LF
U.K.
Telephone: 44 (0) 2476 206629
Email: mgriff52@landrover.com

Materials Engineering
Ford South America Operations
Product Development
Complexo Industrial Ford Nordeste – PD Bldg
Camacari -Bahia, Brazil
Telephone: 55-71-649-3580
Fax: 55-71-649-3580

RECYCLING PLANNING

Correlation, Database, and Recycling
Ford Motor Company
Allen Park Test Lab, 3W-200
1500 Enterprise Drive
Allen Park, MI 48101
U. S. A.
Telephone: 1-(313) 594-3458

Vehicle Recycling
Ford-Werke GmbH
E479/W03
D-50725 Köln (Niehl)
Germany
Telephone: 49-(0)221-9016202
Fax: 49-(0)221-9013458

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)221-9012956
Email: msauerbi@ford.com; cvoss@ford.com

Information Technology
Product Development Center, D-MD/035
Ford-Werke GmbH, Spessart Strasse
D-50725 Köln (Merkenich)
Germany
Telephone: 49-221-9036726
Email: pnoethen@ford.com

Environmental Department, 91710, PVÖS 21
Volvo Car Corporation
SE-405 31 Göteborg
Sweden
Telephone: 46-31-3258771
Email: jlundst2@volvocars.com

Materials Engineering
Jaguar Cars & Land Rover
Jaguar Engineering Centre
W/1/040
Coventry CV3 4LF
U.K.
Telephone: 44 (0) 2476 206629
Email: mgriff52@landrover.com



APPENDIX 2
FORD INFORMATION CONTACTS

FOR INTERNATIONAL MATERIAL DATA SYSTEM (IMDS) INFORMATION: (cont)

MATERIALS ENGINEERING & TESTING, BODY ENGINEERING
Product Development Center, D-ME/2J2
Ford-Werke GmbH, Spessart Strasse
D-50725 Köln, (Merkenich)
Germany
Telephone: 49-(0)221-9037024
Email: ebauer@ford.com

Materials Engineering
Ford South America Operations
Product Development
Complexo Industrial Ford Nordeste-PD Bldg.,
Camaçari - Bahia - Brazil
Telephone: 55-71-649-3580
Fax: 55-71-649-3580

Other regions should contact these numbers:

Global Materials &
Standards Engineering
Ford Motor Company
15000 Century Drive

Dearborn, MI 48120-1267

U.S.A.

Telephone: 1-(313) 805-4888

Fax: 1-(313) 322-1614



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 acronym, "GMAP-e1291" indicates reporting via the **Ford Approval Process**, which involves submission of complete supplier material information including Material Safety Data Sheet (MSDS) physical-chemical data, and material certifications through the GMAP-e1291 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. **Suppliers should contact a Volvo representative (Appendix 2) for guidance relating to the appropriate reporting mechanism for material and substance content in products supplied to these Brands.** 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.
	GMAP-e1291: Welding rods/ wires, dry friction materials must also be reported in IMDS	GMAP-e1291 : Welding rods/ wires, and solder used within Ford facilities for non-production applications	GMAP-e1291 : 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.
	GMAP-e1291: In addition to any IMDS reporting requirements, all fluids, gases, pastes, powders, <i>uncured</i> paints/ sealants/ adhesives	GMAP-e1291: All fluids, gases, pastes, powders, <i>uncured</i> paints/ sealants/ adhesives	GMAP-e1291: In addition to any IMDS reporting requirements, all fluids, gases, pastes, powders, <i>uncured</i> paints/ sealants/ adhesives

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 Description: _____
 Supplier Part Number: _____
 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 FAX OR EMAIL TO NORTH AMERICAN GLOBAL MATERIALS & STANDARDS ENGINEERING : FAX 1-313-322-1614 or email RSMSstat@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	E M P L O Y E E S	M A R K E T S

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