Introduction

The IMDS (International Material Data System) is a tool that aids all suppliers in the automotive supply chain to declare material data for all components (materials and the basic substances in those materials) used in products for the automotive industry. Suppliers submit material information to customers via IMDS as described below and in the referenced documents. Delphi Technologies subscribes to the Global Automotive Declarable Substance List (GADSL) and accepts material data sheets created following IMDS recommendations and the Delphi Technologies guidelines in this document.

This document provides Delphi Technologies suppliers with supporting instructions and clarifications for IMDS reporting per the Delphi Technologies Specification 10949001, Material Reporting, Substances of Concern and Recycled Content.

IMDS submissions facilitate the tracking automotive industry materials to control the use of hazardous substances and eliminate or prevent the use of prohibited substances in finished goods. As Substance of Concern (SoC) legislation is issued and revised, diligent review and management of material formulations by the automotive supply chain ensures the integrity of the data reported in IMDS.. IMDS allows customers to verify the material contents of their purchased parts before and during the part approval process. For Delphi Technologies, Production Part Approval Process (PPAP) **requires** IMDS submission for each part number before PPAP approval can be granted to the supplier. Any changes to the part affecting material content requires resubmission in IMDS.

Material Information Submission

There are four basic steps for entering and releasing Delphi Technologies Specification 10949001, Material Reporting, Substances of Concern and Recycled Content data to Delphi Technologies using the IMDS:

1) **IMDS REGISTRATION**
2) **DEFINING COMPONENTS, SEMI-COMPONENTS AND MATERIALS IN IMDS**
3) **CREATING DATA SHEETS**
4) **RELEASING MDS INFORMATION TO DELPHI TECHNOLOGIES**

**IMDS Home Web Page:** https://www.mdsystem.com/imdsnt/startpage/index.jsp

1) IMDS REGISTRATION

A company must first be registered with IMDS to use their services. There is no charge to register and use the IMDS.

To register a company, select "New at IMDS?" and then "Company Registration." Follow the online registration hyperlink Online registration. Complete all required fields that are located in the online registration form and IMDS will provide a Company IMDS ID.

After registration, video tutorials are available in IMDS after login to assist you with learning to navigate IMDS:
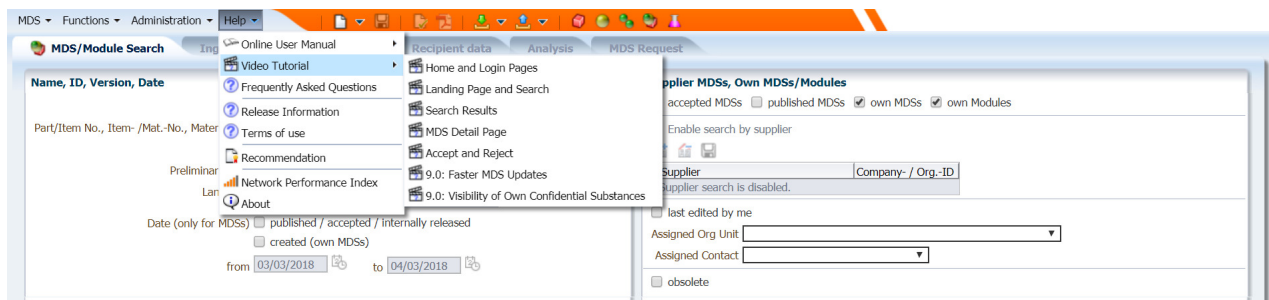
2) DEFINING COMPONENTS, SEMI-COMPONENTS AND MATERIALS IN IMDS

New IMDS users should review the "Reading for New Users" selected from the "New to IMDS?" screen to download the IMDS User Manual and obtain instructions for creating a material and component Material Data Sheet (MDS).

Product Definition

IMDS is a database for suppliers to define all materials in the product supplied to Delphi Technologies. Material data is assembled in IMDS in a "tree structure." To create this tree structure, Delphi Technologies recommends suppliers identify and define all materials (determine the constituent substances that make up the materials, material name, etc.) prior to creating the product tree structure in IMDS. One possible method is to use the product bill of materials (BOM) and create an outline of the product.

Consider the following outline formats:

■ Component   OR   ■ Component
  ■ Subcomponent 1   ● Material 1
    ● Material 1   ▲ Basic substance 1
      ▲ Basic substance 1   ▲ Basic substance 2
      ▲ Basic substance 2   ▲ Basic substance 3
  ■ Subcomponent 2   ETC…
    ● Material 1
      ▲ Basic Substance 1
    ● Material 2
      ▲ Basic Substance 1
  ■ Subcomponent 3
    ● Material 1
      ▲ Basic Substance 1
      ▲ Basic Substance 2
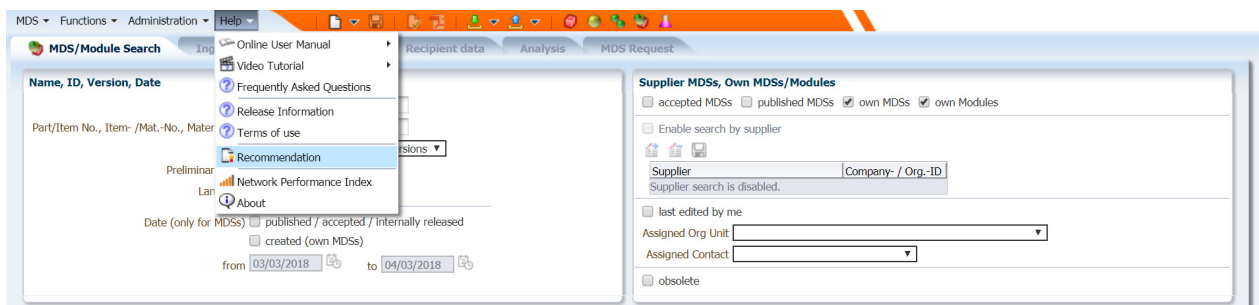   ▲ Basic Substance 3
ETC….
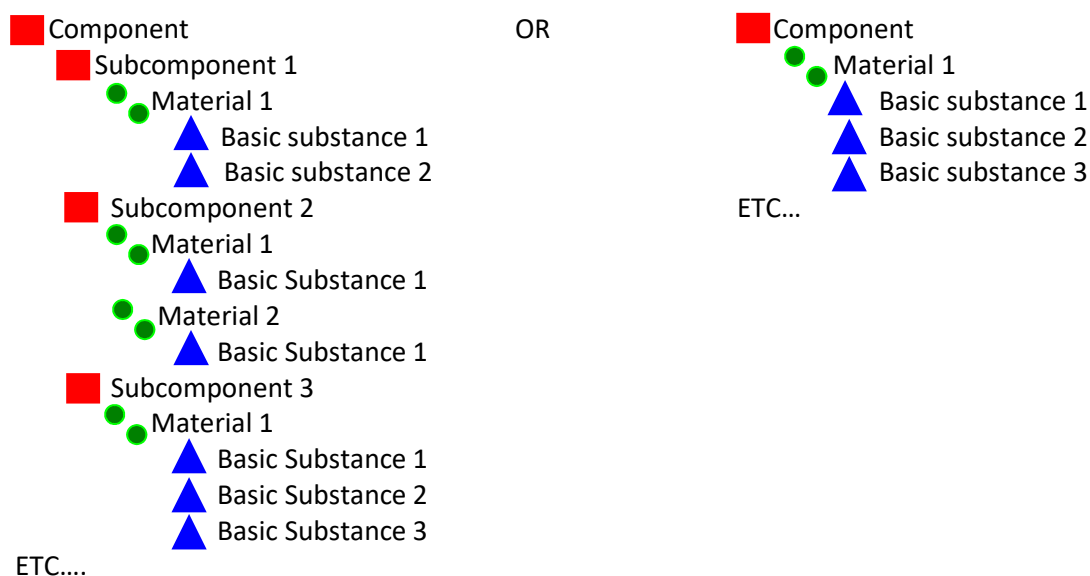
The component is the final saleable assembly; composed of subcomponents, their materials and basic substances, or one material and its basic substances, or any combination in between.

1. Break the BOM into the appropriate groupings – determine:
   - the subcomponents,
     - o the material(s) each is composed of,
       - ▪ the basic substances that compose each material.
2. From this "structure" for the component:
   a) Determine the content that can be pulled from existing data in the supplier system versus that which must be created by the supplier in IMDS.
   b) Use the exploded content picture as a "checklist" to make sure all substances are included in the submission tree.

IMDS Recommendations

The IMDS Steering Committee has published several recommendations for defining materials and for creating Material Data Sheets (MDS). Delphi Technologies expects our suppliers to understand and utilize these IMDS recommendations. After Login, the IMDS recommendations are accessed from Help drop down menu and Recommendation.

IMDS RECOMMENDATION 001

IMDS 001 is the general recommendation and requirements for MDS creation. Each succeeding recommendation expands the IMDS requirements of this general recommendation for specific material applications. Guidance provided includes:

- Define items that fall into a particular recommendation.
- Change management (new IMDS ID versus new version of existing ID)
- Ranges and tolerances
- Example tree structures
- Example searches in IMDS, synonyms for the material, and miscellaneous information that can expand the material topic

IMDS Recommendation 001a defines material classifications.

Data Sheet Definition

Every component, subcomponent, semi-component or material has its own MDS (Material Data Sheet). Each data sheet is built for the specific item and its material composition.

Each sheet will contain the following information:

1. A unique number assigned to the MDS by IMDS.
2. A tree structure of the component/subcomponent/semi-component or material.
3. Details of information that is specific to the item for which the data sheet is being developed.
4. Where applicable, an application code section specific to basic substances that are prohibited and are required to be declared in their application.

In addition to IMDS recommendations 001 and 001a, please refer to the IMDS User Manual, Create Tips – Materials and Create Tips – Component (under READING FOR NEW USERS; see hyperlinks for creating a material and creating a component) for details and step by step instructions.

PROHIBITED AND DECLARABLE SUBSTANCES

- All prohibited and declarable substances must be reported if they are part of the formulation of the material. If GADSL limits for a prohibited substance are exceeded, Prohibited Substance Approval Form for Delphi Technologies Specification 10949001 must be submitted to Delphi Technologies.
- See www.gadsl.org and the referenced legislation in Delphi Technologies Material Specification 10949001 Substance of Concern and Recycled Content for definitions of exemptions threshold levels of substances.
- For materials with substances in a referenced legislation, the substance must be shown as an ingredient in a material clearly identifiable as an exempted material with the appropriate application code (for example, per ELV Directive 2000/53/EC: 10(a) - Electrical and electronic components which contain lead in a glass or ceramic).
- **It is the responsibility of the supplier of the parts or raw materials to ensure compliance with the requirements of the latest GADSL list and the referenced legislation in Delphi Technologies Material Specification 10949001 Substance of Concern and Recycled Content**.
- As ELV exemptions expire, the application codes will still be valid in IMDS, however, a 10949001 Appendix A Prohibited Substance Approval Form should be submitted prior to the exemption deadline to Delphi Technologies with notification of the substance, quantity, application, and when necessary plan of action to eliminate the prohibited substance from the product.

3) CREATING DATA SHEETS

The final component MDS is the compilation of individual MDSs for each component, semi-component, and/or material that makes up the final component.

These MDS pages can come from multiple sources:

1. A Supplier submitted MDS
   A submission received from a supplier by your company for a component or material that has been reviewed and approved, can applied to the MDS to be delivered to Delphi Technologies. This does not guarantee approval by Delphi Technologies, but it does offer consistency in information transmission through the supplier chain.

2. An IMDS committee published MDS
   See Create Tips – Material: Searching for Published Materials section. Material retrieved from these sites is considered "pre-approved" for use in building your company's MDS for submission to Delphi Technologies.

3.   Supplier published data

This can only be used for materials with Delphi Technologies permission from a source that publishes their material data due to the volume of customers that use their material. Delphi Technologies generally does not accept published supplier data, they require it sent/proposed to Delphi for review and approval.

4.   A specific MDS created by your company for a component or material

Each part purchased by Delphi Technologies is assigned a unique Delphi Technologies part number. For each of these parts, a supplier must submit an MDS through IMDS which is representative of the part and its materials and is submitted using the unique Delphi Technologies part number.

Refer to the IMDS User Manual, Create Tips – Materials and Create Tips – Component (under READING FOR NEW USERS; see hyperlinks for creating a material and creating a component) for details and step by step instructions.

 4) RELEASING MATERIAL DATA SHEET (MDS) TO DELPHI CORPORATION

To release IMDS to Delphi Technologies, follow the steps below:

- Review the IMDS Rejection Reasons on the Delphi Technologies public website:

  Delphi Technologies 10949001 Specification Related Documents
- Follow the instructions in the IMDS User Manual and Create Tips – Components: Adding Recipient and Send vs. Propose sections.
- Select **Delphi Technologies PLC [185945]**. *All submissions are submitted to Delphi Technologies 185945 only unless instructed otherwise (for example: company acquisitions or divestitures).*

On the Company data screen the following information is <u>required</u>:

- Part number (Delphi Technologies Part Number**)
- Description of the part
- Drawing number
- Drawing date *or* Drawing change level (not required for semicomponents or raw materials)
- Supplier code (manufacturing site DUNS number)
- Select "Forwarding Allowed"

**The Delphi Technologies part number is normally input as 8-consecutive digits without decimals or spaces. There may be cases of legacy parts that may use a different format such as:

NME, FRD, DED, 12 characters, or other legacy formats.

Details

Transfer Information

Company	Delphi Technologies PLC [185945]
Organisation unit	-
Recip. Status	edit mode
Supplier Code	Supplier DUNS
Name	Part Name
Part/Item No.	Delphi Technologies part number
Transmission/Check Date	not available
Forwarding allowed	☑

Drawing

Drawing No.	Delphi T Drawing N
Drawing dated	Drawing Date
Drawing Change Level	Drawing Rev. Level

Purchase Order

Purchase Order No.	
Bill of Delivery No.	

Report

Report No.	
Date of Report	Current date

Company Data Screen

If your DUNS number is unknown please contact purchasing for the correct DUNS number for your company. For questions on submitting SoC information, send e-mail to the following address:

- SocDelphiTechnologies@delphi.com

Select the "Propose" or "Send" button to initiate MDS release to Delphi Technologies. DO NOT use the "Publish" button as this will publish the information in IMDS, and Delphi does not accept published data from suppliers

The Recipient Status will change based on the status of the submission.

- Not Yet Browsed – The submission has been received by Delphi Technologies, but has not been opened/viewed.

- Browsed – The submission has been opened/viewed, but disposition has not been made.

- Rejected – The submission has been rejected by Delphi Technologies. The rejection reason can be viewed to determine the proper action to correct and resubmit.

- Accepted – The submission has been viewed and approved and if required (check with Delphi Technologies Buyer) an approval letter will be sent by Delphi Technologies for inclusion in the PPAP / Initial Sample Submission package.

- Edit Mode – The submission is not ready to submit because it has not been internally released

- Modified – The submission is being modified at the supplier – it has not been released internally or submitted

- Cancelled by Supplier – The submission has been cancelled by the supplier. This can be due to a change that needs to be made to the submission that was overlooked in the initial creation process (a supplier cannot cancel a submission once it has a Browsed of Accepted status).

Rejection Reasons

The following are the most common reasons for submission rejection:

- ➢ Submission was not made using the Delphi Technologies correct part number
- ➢ Drawing date or drawing revision level is missing
- ➢ Missing or incorrect Norm/Standard on the detail page – especially for plastics
- ➢ The material name does not define the material.
- ➢ Incorrect material classification
- ➢ Missing or incorrect Material Number
- ➢ Missing or incorrect Application Code (prohibited substances)
- ➢ Missing the 9-digit Supplier Code (DUNS number)
- ➢ Incorrect Structure in the Material Tree

These items are covered more extensively in the IMDS Rejection Reasons on the Delphi public website

Delphi Technologies 10949001 Specification Related Documents