

1. SCOPE

The purpose of this specification is to define the global restrictions and reporting requirements pertaining to material reporting, “Substances of Concern (SoC)” and recycled content that make up the parts and materials sold to Delphi Technologies.

NOTE: Aptiv and Delphi Technologies are separate companies and their 10949001 specification and requirements are therefore distinct.

2. REFERENCED STANDARDS AND LEGISLATION

- Directive 2000/53/EC of the European Parliament and of the Council on End-of-Life Vehicles (ELV) to latest version, Annex II, and supporting amendments.
http://ec.europa.eu/environment/waste/elv_index.htm
- Global Automotive Declarable Substance List (GADSL). <http://www.gadsl.org>
- Directive 2002/96/EC of the European Parliament and of the Council on Waste Electrical and Electronic Equipment (WEEE) and supporting amendments
- General Products Safety Directive 2001/95/EEC
- Directive 2011/65/EU of the European Parliament and of the Council on the Restriction of the use of certain Hazardous Substances (RoHS) in electrical and electronic equipment and supporting amendments.
http://ec.europa.eu/environment/waste/rohs_eee/index_en.htm
- Registration, Evaluation, Authorisation, and Restriction of Chemicals (REACH) Regulation. EC No.1907/2006 and supporting amendments.
<http://echa.europa.eu/>
- IEC 62474 - Material Declaration for Products of and for the Electrotechnical Industry. <http://std.iec.ch/iec62474>
- GB/T30512-2014 Substance restriction.
- Biocidal Product Regulation (BPR) Regulation (EU) 528/2012
- PC-1752A Materials Declaration Management Standard and IPC 1754 Materials and Substances Declaration for Aerospace, Defense, HE and Other Industries
<http://www.ipc.org/>
- California Proposition 65 Safe Drinking Water and Toxic Enforcement Act of 1986

3. ENVIRONMENTAL AND SAFETY REQUIREMENTS

The requirements of this specification are in addition to the requirement for submission of a completed Material Safety Data Sheet (MSDS or SDS) with any substance or preparation submission or when a new submission is required due to a change in the material composition.

Delphi Technologies requires suppliers to submit material information (including declaration of any Substances of Very High Concern (SVHCs) on the REACH candidate list) using the Global Automotive Declarable Substances List (GADSL) and the International Materials Data System (<http://www.mdsystem.com>).

For non-automotive components (consumer electronics, medical, military and aerospace, etc.), the IEC 62474 declarable substance groups and declarable substances and reporting via IEC 62474 or IPC-1752A (or similar material/substance disclosure document) is an acceptable alternative. Less preferably, non-automotive suppliers may use a certificate of compliance / declaration letter (compliance to EU RoHS Directive 2011/65/EU, declaration of the absence or presence of SVHCs per EU REACH 1907/2006, etc.) in lieu of or in addition to IEC 62474 or IPC-1752A (or similar material/substance disclosure document).

In the event of a regulated chemical sunset date (Annex XIV REACH Regulation 1907/2006) or restriction (Annex XVII REACH Regulation 1907/2006) suppliers will be required to show IMDS compliance with said requirements at least six (6) months prior to a sunset or restriction date. Specifically, no IMDS records will be accepted within a 6-month period leading to a formal sunset date that shows the presence of a regulated substance of concern (SoC) unless that component, semi-component or material is for a region without such a restriction and is acceptable for use to the end use customer.

For more details on REACH and its obligations, a free download of the Automotive Industry Guideline (AIG) on REACH is available at the European Automobile Manufacturers Association (ACEA) web site at:

<http://www.acea.be/publications/article/reach-automotive-industry-guideline>

Other legislation concerning restrictions, reducing the use of or the risks from hazardous substances in articles still apply separately from REACH. Examples are the General Products Safety Directive 2001/95/EEC and product specific legislation such as the Biocidal Product Regulation (BPR) Regulation (EU) 528/2012, Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS), or Directive 2000/53/EC on End of Life Vehicles (ELV).

In addition to information required for compliance to this specification, a supplier, upon request from Delphi Technologies, shall provide the composition (chemical identity of each constituent and its proportion by weight) of products or materials supplied or proposed to be supplied and all BIOCIDAL, TOXICITY, HEALTH, SAFETY and DANGEROUS GOODS TRANSPORTATION data/guidance to the requesting Delphi Technologies Design for the Environment, Health and Safety Engineer ([DfEHS](#)) or Design Responsible Engineer (DRE). Prior to making any change to the composition or hazard labeling of such products, the supplier shall advise the DfEHS or DRE.

4. CONFORMANCE REQUIREMENTS

4.1. APPLICABILITY

This specification applies to all parts and raw materials that become part of a Delphi Technologies saleable product. This specification does not apply to the process chemicals that are used in manufacturing parts or materials that do not remain in or on the item supplied to Delphi Technologies. Reporting must be completed for each Delphi Technologies part number.

This requirement also applies to “black-box” parts where the supplier holds design responsibility and to “directed-buy” parts where the customer holds design responsibility for the part or material sold to Delphi Technologies.

4.2. REPORTING REQUIREMENT

Delphi Technologies has reporting requirements for all direct parts and raw materials. Delphi Technologies requires the utilization of IMDS using the following:

IMDS Company Name	IMDS Company ID
Delphi Technologies PLC	185945

All data and supporting documentation to comply with the requirements of this specification shall be provided in English.

If the same Delphi Technologies part number is shipped from different sites by the same supplier, an IMDS submission for each site is required, declaring the DUNS number of each site (declared on the supplier code field in the recipient data section in IMDS). A copy-copy submission is acceptable (same part number, different IMDS ID).

Additional Delphi Technologies reporting criteria can be downloaded per the instructions in section 7 below:

- “IMDS Rules & Delphi Technologies Specific Requirements” details the most frequent errors resulting in rejection of supplier IMDS submittals.
- “10949001 IMDS Reporting Instructions” provide basic guidance for IMDS registration, structure and submission.

See Appendix A for flowchart.

For non-automotive components, suppliers are permitted to report material and substances of concern using IEC 62474 or IPC 1752A (or similar material/substance disclosure document). Full material disclosure is preferred. Reporting against IEC 62474 Declarable Substance groups and declarable substances, including REACH and RoHS declarations, is acceptable. IEC 62474 provides an XML schema. Free IPC 1752A generators are available via internet search. Less preferably, non-automotive suppliers may use a certificate of compliance / declaration letter (compliance to EU RoHS Directive 2011/65/EU, declaration of the absence or presence of SVHCs per EU REACH 1907/2006, etc.) in lieu of or in addition to IEC 62474 or IPC-1752A (or similar material/substance disclosure document).

4.2.1. **TIMING**

Delphi Technologies requires material reporting for products and materials in order to support customer reporting requirements (that are increasingly moving earlier and earlier in the design process) and to qualify new or revised materials and products.

Proof of acceptable material and SoC reporting must be provided at time of **Production Part Approval Process (PPAP)** / Initial Sample Submission or new product introduction for Delphi Technologies parts or raw materials that do not utilize the PPAP process. This information may also be requested at prototype for early determinations of compliance.

Prohibited substances (as defined in Section 4.2.7) must be declared to Delphi Technologies as early as possible in the design process.

4.2.2. SoC REPORTING CONFIRMATION

Upon review of the supplier material and SoC submission via IMDS, IEC 62474 or, IPC 1752A, Delphi Technologies may provide an electronic accept/reject confirmation via e-mail. This confirmation certificate may be needed at PPAP / Initial Sample Submission, or new product introduction (see Section 7 for additional detail).

4.2.3. REPORTING STRUCTURE

To facilitate ease of reporting and to protect proprietary information, a Flat Bill of Material (Flat BoM) approach per IMDS Recommendation 019 is acceptable. A Flat BoM, while providing an abbreviated part tree structure, must still disclose all materials and substances according to paragraph 4.2.4 and 4.2.5, contained within the part or raw material.

4.2.4. MATERIALS

One hundred percent (100%) of the materials must be identified using either specific or generic material designations.

4.2.5. SUBSTANCES

All substances that make up the specific or generic materials must be disclosed. One hundred percent (100%) of the substances must be accounted for and must always be attached to a material. Reporting of the specific substances contained in the material is preferred; however the use of miscellaneous substance categories (“wildcard or substance joker” as defined in IMDS Recommendation 001) is acceptable up to 10% by mass in the homogeneous material. The use of pseudo substances and specific CAS# defined substances are preferred.

A pseudo-substance (as defined in IMDS Recommendation 001) gives an accurate description of the substance or the substance group, but does not have an associated CAS number. Some examples are “acrylic resin” or “cotton fiber”. These substances are accepted as basic substances and are not considered jokers or wildcards, therefore their use is not restricted by the 10% rule.

Delphi Technologies requires the declaration of all prohibited and declarable substances as specified in the Global Automotive Declarable Substance List (GADSL). A declaration level of 0.1g/100g (0.1% weight) non-separable, homogeneous material shall be used as the reporting threshold unless otherwise specified in the GADSL or end use customer (such specific requirements will be communicated to the supplier either by that customer or via Delphi Technologies). Any reportable substance below the declaration level does

not need to be reported. Any updates or revisions to the above mentioned documents become effective immediately upon publication.

Miscellaneous joker/wildcard or pseudo-substance classifications cannot contain or be used in lieu of any prohibited or declarable substance as defined in the GADSL.

4.2.6. **RECYCLED MATERIAL CONTENT**

Reporting in IMDS of recycled content (post-industrial and post-consumer) is required for polymeric materials only. Recycled content for metallic and other materials is not required at this time.

4.2.7. **PROHIBITED SUBSTANCES**

In addition to the above material and substance disclosures, all Prohibited (P) Substances as defined in the GADSL, and any substance prohibited by legislation but not yet added to GADSL, must be declared to and approved by Delphi Technologies prior to use.

Prohibited substances not approved for use by Delphi Technologies must be eliminated from the part or material. Prohibited substance deviations may be granted on a case by case basis, depending on commercial application of the product.

4.2.8. **DELPHI TECHNOLOGIES CUSTOMER SPECIFIC REQUIREMENTS**

In addition to the substances and requirements as specified in the GADSL and the referenced legislation (see section 2 REFERENCED STANDARDS AND LEGISLATION), Delphi Technologies may specify other content or reporting requirements, according to Delphi Technologies customer specific requirements. Individual OEM customers may restrict additional chemicals or compounds over and above what is listed in the GADSL. It is the responsibility of the affected product group to manage this issue.

4.2.9. **MATERIAL AND SoC REPORTING RE-SUBMISSION**

Material and SoC reporting re-submission will be required with any significant change, defined as any of the following:

- The addition of any new prohibited or declarable substance as defined in this document.
- In IMDS: as required by IMDS 001 General Rules and Guidelines
- A change in mass of an already reported prohibited or declarable substance as defined in this document equal to or exceeding $\pm 10\%$ of the originally reported value in the homogeneous material, or if the change in mass exceeds a critical legal threshold.

- The addition or deletion of any new material in the product sold to Delphi Technologies.
- A change in mass of a material in a single part equal to or exceeding $\pm 10\%$ of the originally reported value.
- A mass change in the assembly sold to Delphi Technologies equal to or exceeding $\pm 10\%$ of the originally reported value, or a mass change of more than 50 grams.
- A change in DUNS or supplier code
- A new Delphi Technologies P/N is assigned.
- Even for already approved material and SoC reports, Delphi Technologies will request a resubmission of an updated version of the data sheet if needed due to other external reasons such as changes in regulations, vehicle type approval timelines, change in customer requirements, or any other valid reason.

Prior material and SoC submissions that do not exceed the “significant change” threshold as described above, may be used for subsequent PPAP submissions.

5. CERTIFICATION OF COMPLIANCE

Proof of acceptable material and SoC reporting must be provided as part of the PPAP / Initial Sample Submission, or initial product introduction by inclusion of the Delphi Technologies Substance of Concern Confirmation of Receipt letter provided to the supplier, via return e-mail at time of IMDS. For parts or raw materials being re-submitted for PPAP, previous compliance certification may be used if thresholds in Section 4.2.9 have not been exceeded.

For parts or raw materials being Published in IMDS by suppliers which require PPAP approval by Delphi Technologies, the supplier or Delphi Technologies PPAP coordinator should contact SocDelphiTechnologies@delphi.com to receive a Substance of Concern Confirmation of Receipt letter as an acceptable SoC reporting document.

Failure to provide the required material and SoC reporting documentation may result in a rejection of the PPAP / Initial Sample Submission, or initial product introduction. (See section 4 Conformance Requirements).

6. PACKAGING

Packaging is not reported in the IMDS. However, under REACH it is considered an article. Suppliers must communicate the presence of any SVHC in their product packaging sent to Delphi Technologies to their Delphi Technologies packaging contact.

7. RELATED DELPHI TECHNOLOGIES INFORMATION

Supporting material and SoC reporting documentation and information is posted on the Delphi Technologies Covisint Supplier Portal at the following hyperlink:

[Delphi Technologies 10949001 Specification Related Documents](#)

Related Documents that can be found in the link above:

- Delphi Technologies Specification 10949001 - Material Reporting, Substances of Concern and Recycled Content
- Prohibited Substance Approval Form for Delphi Technologies Specification 10949001
- IMDS Reporting Instructions for Delphi Technologies Specification 10949001
- Rejection Reasons - IMDS Rules & Delphi Technologies Specific Requirements

Additional Information:

New at IMDS?, on <http://www.mdssystem.com> also provide additional useful information and tips

Questions and submission inquiries should be directed to either of the following:

- Delphi Technologies SoC Team Email: SoCDelphiTechnologies@delphi.com
- Telephone: +1 (915) 612-8882, +1 (915) 612 1314 or +1 (915) 612-8692

8. REVISION RECORD

Reference Revision Code	Date	Originated By	Description
001	April 2018	SoC Team	Release as Delphi Technologies Specification 10949001

APPENDIX A: Delphi Technologies Specification 10949001 Reporting Flowchart

