OSRAM Index List Environment

Version 26 - April 2024

It is a high ambition of ams-OSRAM AG (including affiliated companies) to be aware of, avoid and reduce hazardous substances in products above and beyond statutory regulations. OSRAM Index List Environment (ILE) is to be applied in the design and production of environmentally compatible products of ams OSRAM business unit Automotive and Specialty Lighting (AMSP, legal entity OSRAM GmbH) as well as for procurement of equipment, parts and materials used in products distributed by these ams OSRAM organisations. This document is not valid for the Semiconductor business units.

Chemical substances in electrical and electronic equipment are subject to an ever-growing number of specific rules and regulations all over the world. ams OSRAM must obey restrictions and bans of certain hazardous substances in homogenous materials or must declare their content or absence in articles. In addition, ams OSRAM must fulfil specific customer requirements regarding content and documentation going beyond legislation. We must be able to provide evidence and documentation any time on short notice.

Some of the most relevant substance restriction and declaration regulations ams OSRAM products can be subject to are listed below:

- EU Directive 2011/65/EU (RoHS) including amendments (e.g. 2015/863)

 EU-RoHS, as well as a growing number of comparable regulations on the Restriction of Hazardous Substances in electrical and electronic equipment (EEE) in other countries
- Directive 2000/53/EC ("End-of-life vehicles ELV") for automotive products
- Regulation (EU) 2023/1542 ("EU battery regulation")
- Regulation (EC) 1907/2006 ("REACH") as well as similar regulations in other countries
 - Art. 33: Declaration of Substances of Very High Concern (SVHC) in articles as listed in Annex XV and XIV
 - Art 67: Restriction of certain hazardous substances as listed in Annex XVII
- Directive 94/62/EC ("Packaging Directive")
- Directive (EU) 2018/851 (amending EU "Waste Framework Directive") demanding to declare SVHCcontaining products and articles in the SCIP (Substances of Concern in Products) database of the European Chemical Agency ECHA
- Regulation EU 2019/1021 on Persistent Organic Pollutants (POPs) including amendments implementing Stockholm Convention on POPs
- Regulation (EC) No 1005/2009 on substances that deplete the ozone layer implementing the UN Montreal Protocol on Ozone Depleting Substances (ODS)
- Other international regulations on restriction or declaration of substances in products such as California Proposition 65, US TSCA (toxic substances control act)

The **ILE** defines ams OSRAMs (Automotive and Specialty Lighting) requirements regarding restriction and declaration of substances in these materials. Our suppliers must be aware of all relevant regulations and must make sure to react on any changes in time.

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Due to the dynamic changes of above-mentioned regulations or customer expectations, regular updates of these declarations will be essential in the future for our suppliers of direct materials. To manage all information requirements OSRAM uses the databases

- BOMcheck® (<u>Home | Sphera BOMcheck</u>) for purchased materials, parts, subassemblies and products.
- IMDS® (IMDS Information Pages IMDS System IMDS Public Pages (mdsystem.com)); mandatory for Automotive products

to collect material and compliance information for purchased materials, parts and subassemblies.

All relevant suppliers must register in and use at least one of above-mentioned databases.

A more detailed overview of different laws and substance regulations can be found on the

→ BOMcheck® List of restricted and declarable substances for Supplied Articles:

Regulatory Content | BOMcheck Docs

The **Suppliers Verification** must be completed accurately and signed by suppliers of equipment, parts and materials, which are delivered to our legal entity OSRAM GmbH and affiliated companies (hereinafter OSRAM) to be used in OSRAM products. It shall express willingness, ability, and assurance to deliver goods which are in conformity with the relevant requirements as well as to provide all data OSRAM needs for compilation of conformity documentation and fulfilment of declaration obligations.

Please send back the signed document to your ams OSRAM contact person!

If you have further questions on the content of this document, please contact reach@osram.com

OSRAM GmbH

Environment, Health and Safety, Munich, Germany

Product stewardship | ams OSRAM (ams-osram.com)

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#FI-For information 2024-10-08 #Confirm valid copy

Suppliers Verification

Restrictions, avoidance and declaration of materials in products (ILE Version 26)

Supplier:	
Address:	
Responsible person / function:	
Phone:	
Email:	
The supplier confirms with signing 1) Hazardous Substances Managem	
Processes are installed in supplier's co substances in products as well as their	empany which ensure compliance with legal requirements regarding use of declaration as far as applicable. The processes include products, parts and Supplier can provide relevant documentation regarding installed processes
☐ Yes, auditable processes a	are installed
\square No, we do not have such p	processes (please provide justified reason)
2) Material Declaration	
communicate either Regulatory Complia	pulations and customer requirements OSRAM requires an electronic way to ance Declarations (RCD) or Full Material Declarations (FMD). Supplier must see and provide declarations and updates whenever they are required due
At least one of the data bases must I	pe used:
Supplier BOMcheck DUNS numb	
Due to the growing customer reques	ets for material declaration of OSRAM products suppliers of electronic

components must provide full materials declarations on request.

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3) Restriction of certain hazardous substances in Electrical and Electronic Equipment (EEE)

According to Directive 2011/65/EU (RoHS) including amendment EU 2015/864 delivered products, parts and materials do not contain the following substances exceeding defined maximum concentration values, unless in an application exempted by Annex III or IV of RoHS Directive (incl. amendments).

Substances as listed in Annex II of RoHS	Maximum concentration values in homogeneous materials
Lead and compounds (Pb)	
Mercury and compounds (Hg)	
Hexavalent Chromium compounds (Cr6+)	
Polybrominated biphenyls (PBB)	
Polybrominated diphenyl ethers (PBDE)	0.1 % (weight)
Bis(2-ethylhexyl) phthalate (DEHP)	
Benzyl butyl phthalate (BBP)	
Dibutyl phthalate (DBP)	
Diisobutyl phthalate (DIBP)	
Cadmium (Cd)	0.01 % (weight)

We will inform OSRAM immediately about relevant changes. Non RoHS conform products in our portfolio can clearly be identified as such. We will provide information regarding substances in exempted applications for every product, part or material supplied to OSRAM in above mentioned data bases BOMcheck® or IMDS®.

Supplier will provide acceptable evidence of compliance for all parts, materials and subassemblies at any time on request. The documentation will fulfil the requirements as described in EN IEC 63000 (*Technical docu-mentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances*). Suppliers of finished products are required to provide a "Technical File" according to the standard e.g. a RoHS test report of the complete product done by an ISO 17025 accredited third party laboratory. Reports shall not be older than 2 years. In case of substances added to RoHS Annex II suppliers will update declarations and reports in time. More information can be found here: RoHS Directive - European Commission (europa.eu)

4) EU Directive 2000/53/EC ("End-of-life vehicles - ELV") for automotive products

In case deliveries to OSRAM are intended for products used in Automotive Industry a full material declaration in IMDS® is a mandatory requirement. OSRAM will notify supplier if materials are used for AM products.

More information can be found here: End-of-Life Vehicles - European Commission (europa.eu)

5) EU REACh substance restrictions applicable to hardware articles and electrotechnical products (EC Regulation 1907/2006, Art. 67, Annex XVII)

REACh Article 67 regulates substance restrictions relevant to parts and materials which could be found in hardware articles and electrical and electronic equipment. A more detailed overview which substances are relevant for OSRAM products can be found on the BOMcheck *Restricted and declarable substances list*:

Regulatory Content | BOMcheck Docs

Products will not contain any of the substances in the list in a restricted application exceeding the defined limits.

6) EU REACh declaration of products or packaging containing SVHC in articles

(EC Regulation 1907/2006, Art 33, Annex XV, XIV)

In case deliveries to OSRAM contain per article any Substance of Very High Concern (SVHC) as listed in the socalled Candidate List of the European Chemical Agency ECHA exceeding 0.1% wt. these SVHC will be declared to OSRAM proactively without further request per product/material in BOMcheck® or IMDS®.

(see Candidate List of substances of very high concern for Authorisation - ECHA (europa.eu)).

The list is currently updated at least twice every year. Suppliers using BOMcheck will be notified to update declarations in time. Supplier will update declarations without reasonable delay after every update, even if no additional SVHC has to be reported. Suppliers using IMDS® will always display SVHC > 0.1% in an article in their full material declaration to OSRAM (ID 1202).

An article is an object, which during production is given a special shape, surface or design, which determines its function to a greater degree than does its chemical composition. The European Court of Justice in 2015, on EU REACH Regulation article definition, that each of the articles, that are assembled or joined together in a complex product, remain as articles and are covered by the relevant duties to notify and provide information when they contain a Substance of Very High Concern in a concentration above 0.1% of their mass (e.g. "lead" exceeding 0.1% wt. in an electronic component leads to declaration duties of a complete EEE, even if lead content in EEE is below 0.1%).

See also <u>ECHA Guidance document</u> and BOMcheck *List of restricted and declarable substances for Supplied Articles*: <u>Regulatory Content | BOMcheck Docs</u>, page 2

7) SCIP database of European Chemical Agency

In case deliveries to OSRAM contain per article any SVHC suppliers based in EU have to declare the product in the SCIP database of ECHA (see: SCIP - ECHA (europa.eu)). As OSRAM has to refer to these SCIP numbers for our own declarable products it is required to submit these numbers.

8) Regulation (EU) 2023/1542 ("EU battery regulation")

In case deliveries to OSRAM are or contain batteries, these will not contain substances restricted by the Directive and exceeding the defined limits.

See also BOMcheck *List of restricted and declarable substances for Supplied Articles*: Regulatory Content | BOMcheck Docs, page:13

For electrical and electronic equipment containing Lithium batteries relevant dangerous goods documentation is required e.g. UN 38.3 test summary. Batteries must be readily removable from products using household tools.

9) Substances which are restricted or declarable by other legislation such as

- Regulation EU 2019/1021 on Persistent Organic Pollutants (POPs) including amendments implementing Stockholm Convention on POPs
- Regulation (EC) 1005/2009 on substances that deplete the ozone layer implementing the UN Montreal Protocol on Ozone Depleting Substances (ODS)
- Other relevant regional or international regulations on restriction or declaration of substances in products

Deliveries to OSRAM shall not contain substances restricted in above mentioned regulation exceeding the defined limits, e.g. PFOS and PFOA, ODS, PIP 3:1.

See also BOMcheck *List of restricted and declarable substances for Supplied Articles*: Regulatory Content BOMcheck Docs, page:11

10) Directive 94/62/EC ("Packaging Directive")

Packaging materials of deliveries to OSRAM as well as materials and products used for packaging of OSRAM products shall meet the substance requirements of EU Packaging Directive. The sum of the Heavy metals Cd, Hg, Pb and Cr^{VI} shall not exceed 100 ppm per material.

See also BOMcheck *List of restricted and declarable substances for Supplied Articles*: Regulatory Content | BOMcheck Docs, page:18

11) Per- and polyfluoroalkyl substances ("PFAS restriction proposal")

Authorities of the European Union (EU) have initiated a restriction proposal for PFAS under REACH Regulation. The proposal is announced to become one of the broadest in the EU's history. Certain members of this large group of PFASs chemicals are already subject to EU legislation. Legislation regarding PFAS is also in force or is under preparation in other countries and regions outside the EU.

Some PFAS are already subject to existing and upcoming legislation such as

- Perfluorooctanoic acid (PFOA), its salts and PFOA-related compounds
- Perfluoroalkyl carboxylic acids (PFCAs)
- Perfluorohexanoic Acid (PFHxA)

Place, Date, Stamp	_	Signature of responsible Mana	aer
Company name	_	Name of responsible Manager	
- · · ·	-	,	
carried out by a third party. In case a violation enclosed verification, ams OSRAM must be notification of the case and reserves the right to take appropriate actions.	of applicable laws or duties laid ied immediately. In case suppliers	down in this document is established after significant to comply with the OSRAM Index List required	gnature of the
ams OSRAM reserves the right to verify supplier	o' compliance with the OSDAM Is	day List Environment at any time as to be a second	sh varifications
OSRAM requires information regarding relevant PFAS can be found in IMDS a		in supplied products and materials. Li	ists of