



March 2024

Declaration of conformity with environmental requirements (substances bans, restrictions, etc.)

Note

This declaration applies exclusively to products from German production sites.

This declaration is valid for an unlimited period.

Only the inclusion of one or more ingredients of our articles into the regulation or other relevant changes will result in a change of the declaration.

Test principles

Any statutory regulation is being regularly reviewed and cross-checked within the company by means of our certified environmental management system (ISO 14001). Such appropriate assessment allows us, Würth Elektronik GmbH & Co. KG - CBT, the confirmation of legal conformity of all delivered items. Information on specific contents can be found in the positive list as shown below.

The following regulations, including amendments and additions, as well as additional legal requirements relevant to our company and their appendices and applicable regulations have been assessed in their respective valid edition and are complied with.

EU law - non-exhaustive list

- 2011/65/EU „RoHS“ – Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment including extensions, e.g. 2015/863/EU (RoHS-3)
- 2012/19/EU „WEEE“ – Guideline on Waste Electrical and Electronic Equipment



- 2000/53/EC „ELV“ - Old Car Directive, amended by 2002/525/EG
- 1907/2006/EU „REACH“ - Directive on the registration, evaluation, authorisation, and restriction of chemical substances
- Various restrictions on persistent organic pollutants (e. g. PFAS)
- 2019/1021/EU - Directive on Persistent Organic Pollutants (POPs)
- AltfahrzeugV - End-of-life Vehicles Ordinance
- ElektroG – German Electrical and Electronic Equipment Act
- ElektroStoffV (Electrical and Electronic Equipment Substances Ordinance) - Directive on the Restriction of the Use of Hazardous Substances in Electrical and Electronic Equipment
- German Chemicals Act & Hazardous Substances Directive, along with all relevant German regulations
- VerpackG – German packaging law

Non -EU- legislation

- EPA regulation TSCA - Ban on PIP, Deca-BDE etc.
- California Act, Proposition 65 – continuously updated list with more than 400 substances, prohibition, or obligation to notify
- China RoHS II- Directive (GB/T 26572-2011)
- Canada POPRC

These and other regulations of NON- EU countries have no direct effect on manufacturing in Germany. However, customers may be affected when exporting to third party countries (country of destination). The positive list of ingredients shows whether the respective regulations are fulfilled.



Ingredients of printed circuit boards - Positive list

Material name (substances)	Identification
Epoxy resin containing halogen (bromine) or halogen-free phosphorus-modified, fully cured (base material)	CAS-No. not applicable (not classified according to CLP)
Glass fibres (reinforcement)	CAS-No. 65997-17-3
Aluminium hydroxide (filler)	CAS-No. 21645-51-2
Copper (conductors)	CAS-No. 7440-50-8
Solder surfaces, alternatively:	
a) Nickel-gold (solder surface) contains cobalt < 1% in the gold content	CAS-No. 7440-02-0 / 7440-57-5 CAS-No. 7440-48-4
b) Tin (soldering surface)	CAS-No. 7440-31-5
c) Lead-tin (soldering surface)	CAS-No. 7439-92-1 / 7440-31-5
Novolak/Epoxy acrylates halogenated (brominated) or halogen-free phosphor-modified, fully cured (soldermask and print)	CAS-No. not applicable (not classified according to CLP)

Substances other than those mentioned above are not contained in circuit boards supplied by Würth Elektronik GmbH & Co. KG Circuit Board Technology!

If you need the ingredients for your specific item, please order a material data sheet.



Specific requirements

RoHS

Exceptions

According to RoHS, products containing lead (printed circuit boards with lead-tin-HAL surface) may only be used if the final product falls under one of the corresponding RoHS exemptions. The duty for applying an exemption approval lies with the manufacturer of the final product.

Flame retardants (with and without halogen content)

Printed circuit boards made of halogen-containing base material contain bromine, but no free TBBPA. Standard epoxy materials do not contain any other halogen-containing flame retardants or additives. Therefore, both halogen-containing and halogen-free printed circuit boards are not hazardous waste. The disposal of our products is subject to the European regulations (e.g., WEEE, ELV, Waste Incineration Directive) as well as the respective national regulations. Recycling by appropriate specialist companies is possible and recommended.

REACH

Würth Elektronik GmbH & Co. KG Circuit Board Technology, as a manufacturer of electronic products, is a so-called "downstream user" in the sense of REACH. All products supplied by Würth Elektronik GmbH & Co. KG are classified as articles according to the REACH regulation. Furthermore, no substances are exposed from these articles under normal and reasonably foreseeable conditions of use. The products supplied are therefore not subject to registration. Würth Elektronik GmbH & Co. KG Circuit Board Technology is generally not subject to the obligation to prepare safety data sheets.



Registration and information requirements in the supply chain (REACH Article 33 / SVHC)

Only substances and mixtures for which the information required by REACH (EU-MSDS) from suppliers / distributors is available are used for production.

Furthermore, Würth Elektronik GmbH & Co. KG undertakes to regularly follow the updates of the REACH requirements and to compare them with the substance information (see above), in particular the extensions of the candidate list as well as the inclusion of substances in the REACH Annexes, Candidate List of Substances of Very High Concern (SVHC), REACH Annex XIV (authorisation) and Annex XVII (restrictions).

The articles concerned are registered in the SCIP database of the ECHA (European Chemicals Agency).

Items concerned:

- Printed circuit boards with lead-tin HASL surface are an item in accordance with Article 33 REACH as they contain more than 0.1% lead.

These statements are based on our current knowledge and experience. No warranty or liability can be assumed for factors beyond our knowledge and control.

Independently of the aforesaid, in our own interest and to ensure a high level of product safety for our customers, we intensively pursue the implementation of REACH on the part of our suppliers.

We are in close communication with our suppliers of chemical substances and preparations (e.g., raw materials, auxiliary materials and operating supplies for the manufacture, processing and treatment of our products or for use in other operational processes) and include the pre-registration or later registration of the relevant substances in REACH in our supplier qualification.