

Lüdenscheid, March 2026

## Directive 2011/65/EU (RoHS)

The European RoHS Directive restricts the use of certain hazardous substances in electrical and electronic equipment. It replaced Directive 2002/95/EC (RoHS 1), which had been in force since 2002, on January 3, 2013.

Electrical and electronic equipment (EEE) is defined in the Directive as devices "*which is dependent on electric currents or electromagnetic fields in order to work properly and equipment for the generation, transfer and measurement of such currents and fields and designed for use with a voltage rating not exceeding 1 000 volts for alternating current and 1 500 volts for direct current.*" The affected equipment categories are described in Annex I. Since July 22, 2019, the Directive's scope has been extended to include all EEE.

The restricted hazardous substances are listed in Annex II:

- Lead (0.1%)
- Mercury (0.1%)
- Cadmium (0.01%)
- Hexavalent chromium (0.1%)
- Polybrominated biphenyls (PBBs) (0.1%)
- Polybrominated diphenyl ethers (PBDEs) (0.1%)

On 31 March 2015, four substances were added to Annex II of the RoHS Directive 2011/65/EU by Delegated Directive (EU) 2015/863:

- Di(2-ethylhexyl) phthalate (DEHP) (0.1%)
- Butyl benzyl phthalate (BBP) (0.1%)
- Dibutyl phthalate (DBP) (0.1%)
- Diisobutyl phthalate (DIBP) (0.1%)

The limit values refer to the homogeneous material, which is defined as "material of uniform composition throughout or a material, consisting of a combination of materials, that cannot be disjoined or separated into different materials by mechanical actions such as unscrewing, cutting, crushing, grinding and abrasive processes."

The restricted substances may only be used for specific applications by making use of exemptions listed in Annex III and IV of the Directive. These exemptions are temporary and must be applied for 18 months before their expiry date. When deciding whether to grant an extension, the European Commission considers if there are reasonable alternatives for the specific application at the time of discussion.

Electrical and electronic equipment (EEE) are in scope of RoHS for which an EU declaration of conformity must be issued and a CE marking affixed. The substance restrictions apply to the homogeneous material of each part used in an EEE. Therefore, every component and every mixture remaining in the EEE must comply with the thresholds.



Alfred Vrieling  
Managing Director



Vivien Sarah Fielk  
Sustainability & Material Compliance Officer