

January 2019 Update

Restriction of Hazardous Substances (RoHS 2)

Dear Customer,

This Customer Letter serves as an update with respect to TE Connectivity's activities to address the **Restriction of Hazardous Substances** in Electrical and Electronic Equipment (RoHS) Directive.

Background

Directive 2011/65/EU (RoHS 2) entered into force on 21 July 2011 and became effective on 3 January 2013 repealing Directive 2002/95/EC (RoHS 1).

The expanded scope of RoHS 2:

- phases in the previously excluded categories of medical devices and monitoring & control instruments, as well as certain cables.
- requires, for finished EEE¹, the use of the CE mark to demonstrate compliance with the Directive.

RoHS 2 restricted the same hazardous substances with the same maximum concentration limits as RoHS 1. Therefore, all products meeting the RoHS 1 substance restrictions remained compliant to the substance restrictions of RoHS 2. When the Delegated Directive 2015/863 entered into force on June 24, 2015, it added 4 new substance restrictions to Annex II of RoHS 2. Those substance restrictions will come into effect as of 22 July 2019.

The commentary below provides more detail related to TE Connectivity's (TE) approach to ensure compliance to RoHS 2.

Awareness and Focus

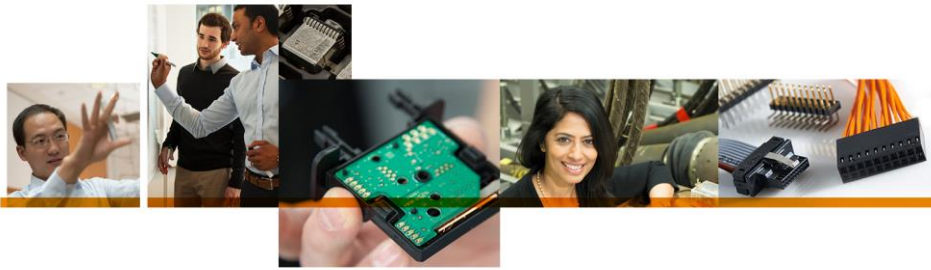
RoHS 2 required Member States to transpose the provisions into their respective national laws by 2 January 2013. TE monitored the development of implementation guidelines and national transpositions and was actively engaged in efforts to further standardise the interpretation guidance documents of both authorities and industry associations.

TE has based its implementation of RoHS 2 on the Frequently Asked Questions (FAQ) document², last updated on 12 December 2012, from the official working group established by the Commission and Member States at the 2011 RoHS/WEEE Technical Adaptation Committee meeting.

TE is also fully aware of the Commission Delegated Directive 2015/863 of 31 March 2015 amending Annex II to Directive 2011/65/EU as regards the list of restricted substances. This Directive required Member States to transpose the provisions into their respective national laws by 31 December 2016. TE monitored those transpositions, while working with our suppliers to conform to the requirements ahead of the legal implementation date.

¹ EEE = Electrical and Electronic Equipment

² Link to the FAQ guidance: http://ec.europa.eu/environment/waste/rohs_eee/pdf/faq.pdf



Substance Restrictions

Until 21 July 2019 RoHS2 will deal with the same six hazardous substances and the same maximum concentration limits as RoHS 1: lead (0.1%), mercury (0.1%), cadmium (0.01%), hexavalent chromium (0.1%), polybrominated biphenyls [PBB] (0.1%) and polybrominated diphenyl ethers [PBDE] (0.1%).

As of 22 July 2019 four new hazardous substances: Bis(2-ethylhexyl)phthalate (DEHP) (0.1%), Butyl benzyl phthalate (BBP) (0.1%), Dibutyl phthalate (DBP) (0.1%), Diisobutyl phthalate (DIBP) (0.1%) come into effect for EEE. For medical devices and monitoring and control instruments, the new substance restrictions will be applicable as of 22 July 2021. As (supplier) data becomes available, it will be shown on the part specific Statement of Compliance (SoC) (indicating whether these substances are present above the maximum allowed concentration limit).

Our [Check Product Compliance Tool](#) provides the actual compliance status of any TE product with respect to RoHS, as well as REACH and halogen content, and the option to download part specific Statement of Compliance (SoC).

Expansion of Scope

RoHS 2 expands the scope of products covered by phasing in EEE categories 8 (medical devices) and 9 (monitoring and control instruments) which were previously excluded under RoHS 1.

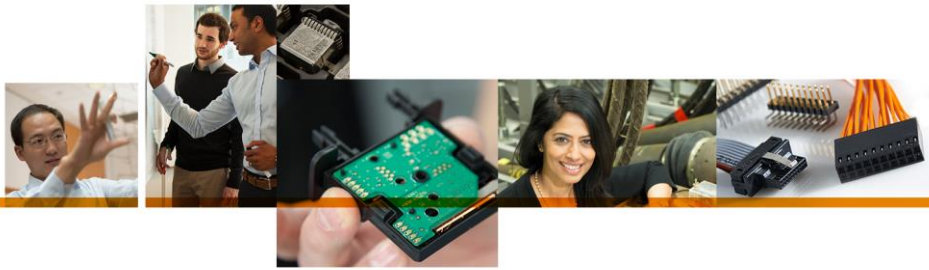
The expanded RoHS 2 scope also includes certain cable assemblies used to connect EEE or to provide power to EEE. According to the 12 December version of the RoHS 2 FAQ, the following cable assembly types are considered to be 'out of scope': optical cables, cables internal to EEE (this includes cables permanently attached to EEE), and cables with a rated voltage greater than or equal to 250 volts. For most cable assemblies, the timeline for being in scope is related to the timeline of the EEE with which they are used. Bulk cable only becomes in scope as of 2019. Please note, however that the majority of TE's cable products already comply with the substance restrictions as a result of our efforts under RoHS 1. TE bulk cable sold to assembly houses will be compliant with the substance restrictions of RoHS 2, confirmed in our Statements of Compliance, but will not contain any RoHS compliance marking as TE does not know the compliance status of our customers' finished product.

The RoHS 2 Directive does not apply to non-electric tools, large-scale fixed installations, or to electrical and electronics equipment designed for use with a voltage rating exceeding 1000 volts AC or 1500 volts DC.

Exemptions

TE continuously monitors the status of the RoHS 2 exemptions. Renewal applications can be submitted for exemptions at risk for expiration. Those exemptions will then stay valid as long as the European Commission has not taken their final decision in the application dossier.

TE updates its compliance systems to reflect changing exemptions and will recode the compliance status of a part as needed. A part claiming an expired exemption will be recoded to 'not compliant'.



CE Marking

In contrast to RoHS 1, RoHS 2 is a CE marking Directive, and requires, for finished EEE, the use of the CE mark on the product to show compliance. The responsibility for affixing the CE mark resides with the manufacturer.

For finished EEE where TE is the legal manufacturer, TE will affix the CE mark. For finished EEE that TE produces for OEMs, the CE mark can, similar to other customer specifications, be affixed by TE on the customers' behalf without TE assuming the OEM's (manufacturer's) responsibility (see section on technical documentation).

Please be advised that CE marking for RoHS 2 only applies to finished EEE in scope of RoHS 2. The use of the CE mark is not allowed on products not in scope of an EU Directive, and can therefore not be applied to TE component products (such as connectors, terminals, switches, relays, sensors, etc.).

Declaration of Conformity (DoC) and Technical Documentation

In addition to placing the CE mark on all finished EEE in scope of RoHS 2, all CE marked EEE will require a Declaration of Conformity (DoC) and associated technical documentation. The responsibility for this DoC and documentation resides with the manufacturer. For finished EEE where TE is the legal manufacturer, TE will provide the DoC and prepare technical documentation per Harmonised European Standard EN50581. For finished EEE that TE produces for OEMs, it is only the OEM that can fulfil the obligations to provide the required documentation under its own name.

Communication of Compliance Status of TE Parts

TE provides a Statement of Compliance (SoC) for all sellable parts. These SoCs reflect TE's declared level of conformity to the major global compliance initiatives (RoHS, ELV, REACH, China RoHS and Halogen content). The available SoCs can be consulted on our website at <http://www.te.com/global-en/utilities/product-compliance.html>.

TE has an ongoing effort to make material declarations available for a growing number of our products in the IPC-1752A format. Considering TE's breadth of portfolio, this is quite an undertaking and these documents will not be available for all parts for some time. For additional information regarding TE Connectivity's Product Compliance initiatives and to access the Check Product Compliance Tool, please visit our Product Compliance Support Center at <http://www.te.com/global-en/utilities/product-compliance.html>.

TE Connectivity Corporation
1050 Westlakes Drive
Berwyn, PA 19312