

ROHS and REACH

RoHS or Restriction of Hazardous Substances or also known as Directive 2002/95/EC, originated in Europe and restricts the use of specific hazardous materials found in electronic products.

The following substances are banned under RoHS lead (Pb), mercury (Hg), cadmium (Cd), hexavalent chromium (CrVI), polybrominated biphenyls (PBB), polybrominated diphenyl ethers (PBDE), and in RoHS3 four phthalates were added (DEHP, BBP, BBP, DIBP).

RoHS2 Directive 2011/65/EU, was published in July 2011 by the European Commission. The original RoHS non compliant materials list was expanded to RoHS3 to cover all electronic equipment, cables, and other parts with compliance required by July 22, 2019 or sooner .

Any business that sells electronic products, sub-assemblies or components directly to EU countries or sells to re-sellers whom sell directly to European countries , distributors or integrators that in turn sell products to EU countries, is impacted if they are to use any of the restricted materials listed In their Products .

For more information on ROHS and the restricted substances please follow the link below to be redirected to the ROHS website .

[ROHS guide](#)

REACH or Registration, Evaluation, Authorization, Restriction of Chemicals is a European regulation first introduced on 18 December 2006. REACH is a regulation of the European Union, put in place to improve the protection of human health and the environment from the risks that can be posed by chemicals, It also promotes alternative methods for the hazard assessment of substances in order to reduce the number of tests on animals.

Under REACH substances that fall into one of the following categories can be listed as a substance of very high concern or an SVHC.

- 1.Carcinogenic or toxic for reproduction
2. PBTS or Persistent , bio accumulative and toxic
3. vPvBs or Very persistent and bio accumulative

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4. Seriously and irreversibly harming the environment or human health , such as substances that are damaging to the hormone system .

Manufacturers , importers , Downstream users , and companies outside of the U.S will have some responsibility under REACH .

As of 15 January 2019 The list of SVHC provided by the ECHA (european Chemicals Agency) includes 197 substances .

For a complete and most recent SVHC candidate list list of Substances considered SVHC's please click the link below to redirect to the ECHA website

[SVHC candidates list](#)

For a complete list of Hakko and CHP brand products that are manufactured in compliance with EU ROHS , ROHS2 , and ROHS3 directives Please view the attached file

HakkoUSA Knowledge Base

<http://kb.hakkousa.com/KnowledgebaseArticle11735.aspx>