



## Compliance with RoHS regulations

### RoHS Directive

Since 01/07/2006 the European Directive 2002/95/EU of 27/01/2003 (known as the RoHS Directive - "Restriction of Hazardous Substances") with its related amendments has restricted the use of certain hazardous substances in electrical and electronic equipment.

The European Directive 2011/65/EU of 08/06/2011 (known as the "amended RoHS Directive" or "RoHS 2") confirms the previous restrictions and extends them to include medical devices and monitoring and control instruments.

The Commission Delegated Directive (EU) 2015/863 of 31/03/2015 (RoHS 3), amends Annex II of Directive 2011/65/EU of the European Parliament and Council as regards the list of substances subject to restrictions.

Substances subject to restrictions:

- **Lead** (0.1%)
- **Mercury** (0.1%)
- **Hexavalent chromium** (0.1%)
- Polybrominated biphenyls (**PBB**) (0.1%)
- Polybrominated diphenyl ethers (**PBDE** including DecaBDE, OctaBDE, PentaBDE etc.) (0.1%)
- **Cadmium** (0.01%) (with some exceptions, including electrical contacts – exemption 8b)
- **Bis(2-ethylhexyl) phthalate (DEHP)** (0.1%)
- **Butyl benzyl phthalate (BBP)** (0.1%)
- **Dibutyl phthalate (DBP)** (0.1%)
- **Diisobutyl phthalate (DIBP)** (0.1%)

For electrical and electronic devices the new restrictions will apply from 22/07/2019. For in vitro medical devices and monitoring and control instruments the new restrictions will apply from 22/07/2021.

### Scope of application of the RoHS Directive

#### Categories of electrical and electronic devices and instruments under the RoHS regulatory regime

- Large household appliances
- Small household appliances
- IT and Telecommunications Equipment
- Consumer Equipment
- Lighting Equipment
- Electrical and electronic devices (except fixed large-scale industrial installations)
- Toys, leisure and sports equipment
- Automatic dispensers
- Medical devices (except all implanted and infected products)
- Monitoring and control devices (for example control panels)
- Other electrical and electronic equipment not included in the above categories (from 22/07/2019).

**Compliance of Finder products with the RoHS Directive**

With regards to Environmental Management Systems and the strict compliance with current regulations on the environment, Finder selects the materials for its processes and products with the greatest care and respect for the environment - from the initial planning stages through to manufacture and packaging.

Between the end of 2004 and the beginning of 2006, all Finder's products were made compliant with the requirements of the RoHS directive and any substances banned under this directive were removed. This compliance is further confirmed with regards to amended RoHS Directive (RoHS 2) in force since 2013 and Commission Delegated Directive 863 (RoHS 3) in force since July 2019 (for electrical and electronic devices).

**Cadmium - exemption 8b**

Following the decision by the European Commission 2005/747/EU of 21/10/2005, confirmed in the RoHS 2 update, Cadmium and its compounds in electrical contacts are exempt from prohibition (exemption 8b).

As a consequence relays, with AgCdO contacts are permitted in all applications.

However, if required, all Finder relays are available "Cadmium free", using contact materials free of Cadmium such as AgNi or AgSnO<sub>2</sub>. Note however; AgCdO offers a particularly good balance between electrical life and switching capability for solenoids and inductive loads in general (DC in particular), as well as motors and high resistance loads. Alternative contact materials such as AgNi and AgSnO<sub>2</sub> do not always guarantee the same electrical life/ performance as AgCdO, depending on the type of load or application. (See product technical specifications and the General Technical Information section in our catalogue or on our website).

**Availability of products compatible with RoHS or "Cadmium free"**

Finder identifies its products using two types of labels.

**Example of RoHS-compliant product**

The product is free of Lead, Mercury, Hexavalent Chromium, PBB, PBDE, banned phthalates and Cadmium except in contacts.



RoHS compliant

**Example of RoHS-compliant and "Cadmium Free" product**

The product is free of Lead, Cadmium, Mercury, Hexavalent Chromium, PBB, PBDE, and banned phthalate.



RoHS compliant



No Cadmium

### China RoHS

At the end of January 2016, the Chinese Ministry for Industry published the decree for the “restriction on the use of hazardous substances in electrical and electronic equipment” (China RoHS 2). The decree, which came into force in China on 01/07/2016, replaces the previous one and has a wider scope of application compared to the equivalent European legislation (Directive 2011/65/EU RoHS 2).

In brief, the decree sets out the rules on electrical and electronic products designed for use with a voltage under 1,000 V for AC and 1,500 V for DC, and which work with electrical current or electromagnetic fields, without exceptions or exemptions of any sort. Similar to the previous decree, the “China RoHS 2” decree imposes rules on labelling and on communicating to the market the relevant information regarding the substances used in products.

Finder’s products are compliant with the legislation described.

Compliance is certified by this symbol on our products and on their packaging.

