

REDUCTION of HAZARDOUS SUBSTANCES OVERVIEW

The European Union legislation 2002/95/EC (Electrical and Electronic Equipment) and the People's Republic of China legislation SJ/T 11363-2006 (Electronic Information Products) requires that manufacturers of the product groups listed below, must choose product materials with more focus on our environment and thus support recycling legislation. This recycling legislation is called WEEE in the EU and MII Order #39 in China. These RoHS Directives ban the placing of products on the EU market with these hazardous substances and forces the marking and disclosure of these substances on products placed on the China market. Both legislations define the Maximum Concentration Value per the homogeneous substance.

- 1000 ppm or 0.1 wt% for Lead
- 100 ppm or 0.01 wt% for Cadmium
- 1000 ppm or 0.1 wt% for Mercury
- 1000 ppm or 0.1 wt% for Hexavalent Chromium
- 1000 ppm or 0.1 wt% for PBB and PBDE

RoHS substances can be found in many locations within products including:

Substance	Example Locations
LEAD	Solder, paints, fans, power supplies, plating, metal parts, cables, circuit breakers, electrical components, glass, fuses, flex circuits, boards
CADMIUM	Paints, coatings, contacts, fasteners, PVC cables, metal finishing/plating, detectors/devices/LEDs, recycled plastics
MERCURY	Switches, lamps, paints, PVC, displays
Hex CHROMIUM	Aluminum conversion coatings (chem film), metal finishing, fasteners, paints
PBB & PBDE	Flame Retardants in plastics, cables, PCB, electrical components, paints, fans

European Union Exemptions: [http://www.schroff.us/rohs/eu_exemptions.pdf]

European Union Applicable Categories of Electrical and Electronic Equipment

1. Large household appliances
2. Small household appliances
3. IT and Telecommunications
4. Consumer equipment
5. Lighting equipment
6. Electrical and electronic tools (with the exception of large-scale stationary industrial tools)
7. Toys, leisure and sports equipment
8. Automatic dispensers

NOT Applicable Categories of Electrical Equipment

1. Medical Devices (exemption expires in 2012)
2. Monitoring and Control Instruments (exemption expires in 2012)

China Applicable Categories of Electronic Information Products

1. Electronic radar products
2. Electronic communications products
3. Radio and television products
4. Computer product
5. Home electronic products
6. Electronic instrument measuring products
7. Specialized electronic products
8. Electronic components and parts
9. Electronic applications
10. Electronic materials
11. Electronic accessories