

# Skyray Instrument Inc.

## RoHS and WEEE

**RoHS**, also known as Lead-Free, stands for Restriction of Hazardous Substances. RoHS Directive 2002/95/EC restricts the use of six hazardous materials found in electrical and electronic products. All applicable products in the EU market after July 1, 2006 must pass RoHS compliance. RoHS impacts the entire electronics industry.

**WEEE** stands for Waste from Electrical and Electronic Equipment. WEEE Directive 2002/96/EC mandates the treatment, recovery and recycling of electric and electronic equipment (90% ends up in landfills). All applicable products in the EU market after August 13, 2006 must pass WEEE compliance and carry the "Wheelie Bin" sticker.

RoHS specifies maximum levels for the following six restricted materials:

- **Cadmium (Cd):** 100 ppm
- **Mercury (Hg):** 100 ppm
- **Lead (Pb):** 1000 ppm
- **Polybrominated Biphenyls (PBB):** 1000 ppm
- **Polybrominated Diphenyl Ethers (PBDE):** 1000 ppm

RoHS compliance testing can be carried out using portable RoHS analyzers known as x-ray fluorescence or XRF metal analyzers, such from Skyray Instrument Inc.

### Exempt

The following products are currently exempted from RoHS compliance:

1. Large stationary industrial tools
2. Control and monitoring equipment
3. National security use and military equipment
4. Medical devices
5. Some light bulbs and some batteries
6. Spare parts for electronic equipment in the market before July 1, 2006.

The following product categories are impacted under the RoHS Directive:

1. Large household appliances: refrigerators, washers, stoves, air conditioners
2. Small household appliances: vacuum cleaners, hair dryers, coffee makers, irons
3. Computing & communications equipment: computers, printers, copiers, phones

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4. Consumer electronics: TVs, DVD players, stereos, video cameras
5. Lighting: lamps, lighting fixtures, light bulbs
6. Power tools: drills, saws, nail guns, sprayers, lathes, trimmers, blowers
7. Toys and sports equipment: videogames, electric trains, treadmills
8. Automatic dispensers: vending machines, ATM machines