

RoHS screening: Your questions answered

The Soldertec RoHS screening test service

your questions answered

Do I need to get my products tested for RoHS compliance?

If you are an assembler of OEM or CEM product, a European manufacturer selling within the EU, or an importer of manufactured product into the EU, you must be able to demonstrate compliance with the Restriction of Hazardous Substances (RoHS) Directive (2002/95/EC) when your finished product is put on the market in the EU.

Which substances are restricted?

Electronic and electrical equipment must not contain more than the maximum permitted levels of lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBBs) and polybrominated diphenyl ethers (PBDEs).

What is the deadline for compliance?

The requirements of the RoHS Directive comes into force on 1st July 2006. Product put on the market after this date will be required to be compliant.

What are the implications if my product doesn't comply by then?

An enforcement authority may ask to see evidence that a producer has used due diligence and taken reasonable steps to comply with the requirements of the RoHS Directive and national legislation. Failure to comply could result in the eventual withdrawal of your product from the market.

How can I find out whether my product complies?

If materials declarations or certificates of compliance for each component of your product are not available from your suppliers, or if you have any doubts over the accuracy or completeness of that information, it is advisable to subject your product to a screening test, which measures the concentration of the restricted substances within it.

Can't I simply crush my product and analyse the remains?

This is a popular misconception; unfortunately the process is not so straightforward. Each homogeneous material within each individual part of



the product must comply with the RoHS Directive – the housings, cabling, PCBs, components, fixtures and fittings. To detect the restricted substances, one must know which materials are permitted in a given application and which are not, and also where to look for them, since they are sometimes found deep within the sample to be tested.

Which test method is used to perform the analysis?

A variety of analytical techniques must be employed. Non-destructive methods only examine the surface of the sample and may not detect substances below the top few microns. A destructive test allows materials buried below the surface layer to be investigated, confirming how many homogeneous materials are present in the sample. An example of this is a semiconductor that is made of many different homogeneous materials each of which should be considered individually.

How is the meaning of homogeneous material interpreted?

A homogeneous material is usually considered to be any individual material such as a plastic or ceramic or metal. An example would be an insulated wire containing two homogeneous materials - the PVC insulation and the copper wire. Any component of a product may contain several different homogeneous materials.

How can Soldertec help me?

Soldertec is an independent laboratory that is uniquely equipped to perform RoHS screening tests. With a thorough understanding of the Directive and its implications for your business, our experienced personnel can offer impartial advice and tailor an analysis programme to your specific needs. We have also invested in a diverse array of analysis equipment needed to screen for the restricted elements at part-per-million levels, ensuring a very high degree of accuracy.

Whilst we do not provide certification of conformance, on completion of testing we issue a clearly-written, comprehensive and confidential report setting out the findings of our analysis of your product. At all times, you can be assured of friendly and professional service at very competitive rates.

To arrange testing of your product:

In the first instance, please contact us with details of your product and we will discuss with you the test methods required.

Tel: [+44 \(0\)1727 875 544](tel:+44(0)1727875544)

Email: rohs@tinttechnology.com

or [visit our laboratories](#), we'll be pleased to demonstrate our capabilities to you without obligation.



www.lead-free.org
Tel: 0044 (0) 1727 875 544
Fax: 0044 (0) 1727 871 341
Email: rohs@tintechnology.com

Soldertec
Unit 3, Curo Park
Frogmore
St. Albans
Hertfordshire
AL2 2DD
United Kingdom

About Soldertec Global

Soldertec Global is renowned for its technical leadership in the field of lead-free soldering, offering a unique combination of research, development and testing activities.

Superb facilities

The company's chemical and metallurgical analysis facilities provide a comprehensive range of investigative techniques, designed to address a variety of process and industry issues. The laboratories can provide both rapid problem-solving services and longer-term project support across many disciplines, ranging from failure analysis to troubleshooting, and accelerated life testing to RoHS compliance.

Online support

A web-based Soldertec membership package enables companies to keep abreast of all environmental, legislative, technical and business issues related to lead-free production, and promotes awareness of government, EU or other project-funding opportunities.

Years of experience

Soldertec Global is a part of Tin Technology, the world's foremost authority on tin. More information is available from **www.lead-free.org**