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## **What is RoHS and what do you need to know about it.**

RoHS (Restriction of Hazardous Substances) is a directive legislated by the European Union to prohibit the use of certain substances. The substance which has the biggest impact on the pwb industry is lead, a key ingredient in the assembly of the circuit board. Other materials had to be found to replace it but none had the low temperature characteristics of lead. This will have a direct impact on soldering and reflow temperatures associated with the assembly process. These materials require an additional 30C to reach their melting point. In order to protect against the higher temperatures, circuit board manufacturers have had to look for materials capable of withstanding the higher temperatures.

The material specifications of most importance are the Tg (glass transition temperature or the temperature at which the material changes from a semi-rigid to a softened state), Td(temperature of decomposition, when the material begins to fall apart and separate) and CTE (coefficient of thermal expansion, how much will the material stretch). A number of products exist with varying values for each depending on the requirements of the assembly process. For example, A product with several reflows would require a higher Tg (170+) and Td(330+) with a low CTE whereas a product with only a few reflows could have a lower Tg with a high Td and low CTE. The difference in pricing is significant between the two.

## **What is WEEE**

WEEE (Waste of Electrical and Electronic Equipment) is a directive legislated by the European Union to address the disposal and recycling of electrical waste. Products which contain halogens have to be identified and treated as special waste while halogen free products can be disposed of as standard waste.

## **Our Role**

Labo Circuits Inc. is actively involved in the continued evaluation of RoHS/Halogen free products to meet all of our customer's requirements. We offer a variety of finishes which are all compatible with RoHS. We are participants in a coalition of board manufacturers and assembly shops as well as a testing facility to evaluate the impact on the industry as a whole.

At Present, Labo Circuits can offer its customers products which are RoHS compliant.  
Feel free to contact us if you have any questions.