G&B PROJECTS COMPANY
Barnards Green, Malvern, Worcestershire WR14 3LY
Tel: (01684) 574367 Fax: (01684) 560225
International Tel: +44 1684 574367 Fax +44 1684 560225
E-mail: info@gandbprojects.co.uk www.gandbprojects.co.uk

Directive (EU) 2011/95/EC & 2015/863
RoHS (3) Regulations & Compliance

EU Directive 2011/95/EC came into force in July 2011. Specific to the Restriction of use of certain Hazardous Substances (RoHS), this legislation requires manufacturers of electrical and electronic equipment (EEE) to exclude six restricted substances from the materials contained within their products. The Directive applies to EEE that is dependent upon electric or electromagnetic fields in order to work properly, and also includes certain categories of equipment for the generation, transfer and measurement of such currents and fields and designed for use with a voltage rating not exceeding 1,000 volts for a/c and 1,500 volts for d/c. Unless your products are specifically listed as one of the exemptions, with time it will apply to every manufacturer of EEE. For RoHS (2) there were three new categories, with phased introductions to cover the rest of this EEE.
The recast RoHS (2) Directive became a CE marking Directive. What this means is that if you manufacture an electrical/electronic component, device or equipment, you can no longer CE-mark in accordance with just the Medical device, Machinery, EMC or Low Voltage Directive. Compliance wit the RoHS Directive is required before you can place the CE mark on the product.

The initial six restricted substances are:

- Cadmium (Cd): max 0.01%
- Mercury (Hg): max 0.1%
- Lead (Pb): max 0.1%
- Hexavalent Chromium (Cr6+): max 0.1%
- Polybrominated biphenyls (PBB): max 0.1%
- Polybrominated diphenyl ethers (PBDE): max 0.1%

As an alloying element, Lead is allowed in the following metals from which components may be made: Steel 0.35% weight, Aluminium 0.4% weight and Copper Alloys 4.0% weight. Specifically, we apply exemptions 6(a) "Lead as an alloying element in Steel (EU/509)" and 6(c) "Lead as an alloying element in Copper (EU/211" At the time of writing, these exemptions can still be applied, with a current expiry date of July 30th 2027.
A short review period of three years was proposed for applications where lead is present for machining purposes. Despite massive ongoing research on lead-free alternatives, it is still mostly not possible to substitute leaded copper alloys. As such, an extension for Exemption 6(c) was requested for the maximum permissible validity period.
Article 6 of the Directive proposed a REACh based methodology for identifying new Substances for restriction, and goes some way to aligning RoHS with other Directives. RoHS (2) provided for the broader scope to be phased in over a long period and aims to align RoHS with REACh chemical policy ensuring a science-based approach to Substance

restriction. In line with this revised methodology, on June 4th 2015 the EU commission published a new Directive (EU) 2015/863 to amend Annex II to EU RoHS 2 (Directive 2011/65/EU) to add 4 phthalates onto the list of restricted Substances. This amendment is commonly known as RoHS (3), and the 4 additions are:

- Bis(2-Ethylhexy) phthalate (DEHP): max 0.1%
- Benzyl butyl phthalate (BBP): max 0.1%
- Dibutyl phthalate (DBP): max 0.1%
- Diisobutyl phthalate (DIBP): max 0.1%

This brings the number of currently restricted substances to 10. DEHP, BBP, DBP and DIBP are primarily used as plasticisers to soften plastics. They were restricted from 22nd July 2019 for all EEE apart from Category 8 (Medical Devices) and Category 9 (Monitoring and Control Equipment) which had an additional 2 years to comply by 22nd July 2021. Some EEE products are outside the scope of EU RoHS. Military equipment, large-scale stationary industrial tools, large-scale fixed installations, active implantable medical devices, and photovoltaic panels are excluded, as are batteries and package materials since they are subject to different directives.

As a Components manufacturer, G&B Projects does not fall under the jurisdiction of the Directive. The Directive does not cover components or sub-assemblies; moreover, the equipment producers are obliged to take their own steps to ensure that all parts and materials used in their products do not contain restricted substances. However, G&B Projects is committed to comply with the Directive to ensure the continuity of availability of suitable product for our customers. We remain in close contact with our suppliers, and as such we have requested that they inform us in writing and without delay, of any products supplied to us that contain restricted Substances in concentrations exceeding the MCV.

According to our current information, we assume that none of our products contain any restricted substance sin concentrations exceeding the MCV.

Tim Kitching
Quality manager
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