

VANCOUVER - 7470 Vantage Way, Delta (British Columbia) V4G 1H1 Tel: (604) 940 2440 Fax: (604) 940 0462
EDMONTON - 9810 39 Ave, Edmonton (Alberta) T6E 0A1 Tel: (780) 436 6660 Fax: (780) 435 5976
CALGARY - 7805 51 St, Calgary (Alberta) T2C 2Z3 Tel: (403) 236 1418 Fax: (403) 236 0844
WINNIPEG - 333 DeBaets St, Winnipeg (Manitoba) R2J 3V6 Tel: (204) 663 1450 Fax: (204) 663 1456

RoHS Directive 2011/65/EU

The European Community has implemented the subject directive to reduce certain hazardous substances in electronic equipment introduced into Europe. As a result of this directive, various forms of declaration or compliance have been requested by customers of Encore Metals for their use in determining compliance with the RoHS directive.

Prohibited / restricted substances are **lead, mercury, cadmium, hexavalent chromium**, and chemical compounds known as **PBB & PBDE**. PBB and PBDE are not applicable to metallic materials

Although the vast majority of items sold by Encore Metals are compliant to this directive, there are exceptions. Listed below is a summary of the exemptions which apply to Encore Metals product inventory:

- Annex III of the directive permits **lead in steel** to a maximum of 0.35% (Rule 6a) which makes all steels, even leaded carbon and alloy steels, compliant.
- Lead in brass is permitted up to a maximum of 4% (Rule 6c) making brass products up to this limit compliant. Care should be taken to investigate the composition if dealing with a buy-out order.
- Lead in aluminum alloys is restricted to a maximum of 0.4% (Rule 6b), making aluminum products with applicable chemistries compliant. Non-compliant aluminum product is 6262.

In addition, the following general rules apply: Stainless steel products are RoHS compliant. Mercury and cadmium are not constituents of any material supplied by Encore Metals. Chromium as an **alloying element** in metals is **not** hexavalent chromium. Alloys containing Cr are compliant with RoHS. Chromium <u>plating or di-chromate anti-corrosion</u> <u>coatings **are** hexavalent chromium</u> and therefore non-compliant.

Compliance to this directive begins with design and then specification of materials that are appropriate. Appropriate materials are always compliant.

Jams Jury

James Murphy Quality Assurance Manager