

Frequently Asked Questions about the Banning or Restricting of Beryllium in Products FAQ 211

Is the use of beryllium or materials containing beryllium banned or restricted?

No. The use of beryllium and beryllium-containing materials is not banned, restricted or otherwise limited by any country worldwide.

Do the European Union (EU) directives that address the end-of-life management of automobiles, and electrical and electronic equipment ban or restrict the use of beryllium in products?

No. Beryllium was not included in any special end-of-life requirements or restrictions in the final EU directives on End-of-Life Vehicles (ELV)^{1,2}, on the Restriction of the use of certain Hazardous Substances in electrical and electronic equipment (RoHS)³, or on Waste Electrical and Electronic Equipment (WEEE)⁴. The only metal and metal compounds banned by these directives are lead, mercury, cadmium, and hexavalent chromium.

Where can the EU directives be found and obtained?

The above referenced EU directives can be found and downloaded from the internet at the following website locations:

End-of-Life Vehicle Directive Annex II Amendment to End-of-Life Vehicle Directive RoHS Directive WEEE Directive

Was beryllium included in the approved RoHS Recast adopted by the European Council?

No. The <u>RoHS Recast</u> proposal issued by the European Council on June 8, 2011⁵ and <u>Amendments</u> issued March 31, 2015⁶ do **not** include the addition of beryllium or beryllium oxide to the list of restricted substances in electrical and electronic equipment (EEE) nor does it include any requirements related to beryllium or beryllium oxide in EEE. Therefore, beryllium, as well as all beryllium-containing materials, can continue to be used in EEE and are in conformance with the RoHS Directive.

With the adoption of the RoHS Recast, microelectronic designers, engineers, and manufacturers can be confident that beryllium and beryllium-containing materials will continue to be available to provide unique and reliable design solutions in EEE without legislative restrictions

Does the Joint Industry Guide for Material Composition Declaration in Electronic Products ban or restrict the use of beryllium in products?

No. The use of beryllium oxide and beryllium-containing materials is not banned, restricted or otherwise limited by the IEC 62474 - Material Declaration for Products of and for the Electrotechnical Industry⁷. The JIG is a voluntary standard developed by the Consumer Electronics Association (CEA®), DIGITALEUROPE and the Japanese Green Procurement Supply Standardization Initiative (JGPSSI), and supported by companies in the electronics industry. For more detailed information on the JIG and its association with beryllium and beryllium-containing materials, please see FAQ106 - Frequently Asked Questions about the Material Declaration of Copper Beryllium in Products.

How can I obtain assistance?

If you have any questions regarding the above information, please contact your sales representative; our sales department at +1-216-486-4200; or, the Product Safety Hotline at 1-800-862-4118 (in the U.S.) or +1-216-383-4019 (outside the U.S.). This document, as well as other product specific safety data information, can be found at <u>www.materion.com</u>. Additionally, information on the Beryllium Worker Protection Model and process specific safety guidance can be found in the Interactive Guide to Working Safely with Beryllium and Beryllium-containing Materials at <u>www.berylliumsafety.com</u>.

¹ Directive 2000/53/EC of the European Parliament and of the Council of 18 September 2000 on end-of life vehicles.

² Commission Decision of 1 August 2008 amending Annex II to Directive 2000/53/EC of the European Parliament and of the Council on end-of- life vehicles (notified under document number C(2008) 4017).

³ Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

⁴ Directive 2002/96/EC of the European Parliament and of the Council of 27 January 2003 on waste electrical and electronic equipment (WEEE).

⁵ Directive 2011/65/EC of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment - Recast (RoHS 2)

⁶ Directive 2015/863 of 31 March 2015 amending Annex II to Directive 2011/65/EU of the European Parliament and of the Council as regards the list of restricted substances

⁷ IEC 62474 - Material Declaration for Products of and for the Electrotechnical Industry) – September 24, 2014.