

FREQUENTLY ASKED QUESTIONS

Frequently Asked Questions about the Banning or Restricting of Copper Beryllium in Products FAQ 100

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

No. The use of copper 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 copper beryllium alloys in products?

No. Copper beryllium alloys were 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 copper beryllium included in the RoHS Recast adopted by the European Council?

No. The <u>RoHS Recast</u> 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, copper beryllium alloys, as well as all beryllium-containing alloys, 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-containing alloys will continue to be available to provide unique and reliable design solutions in EEE without legislative restrictions

Does the IEC 62474 - Material Declaration for Products of and for the Electrotechnical Industry ban or restrict the use of copper beryllium alloys in products?

No. The use of copper beryllium and beryllium-containing materials is not banned, restricted or otherwise limited by the IEC 62474 - Material Declaration for Products of and for the Electrotechnical Industry ⁷. IEC 62474 is a voluntary standard, originally developed by the Consumer Electronics Association (CEA®), DIGITALEUROPE and the Japanese Green Procurement Supply Standardization Initiative (JGPSSI), adopted by the International Electrotechnical Commission and supported by companies in the electronics industry. For more detailed information on IEC 62474 and its association with copper beryllium, 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 www.materion.com. 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 www.berylliumsafety.com.

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 27 June 2002 amending Annex II of Directive 2000/53/EC of the European Parliament and of the Council on end-of-life vehicles (notified under document number C(2002) 2238).

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.