

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

FAQ100

1/25/10

## **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)<sup>1,2</sup>, on the Restriction of the use of certain Hazardous Substances in electrical and electronic equipment (RoHS)<sup>3</sup>, or on Waste Electrical and Electronic Equipment (WEEE)<sup>4</sup>. 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:

ELV - <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2000:269:0034:0042:EN:PDF>

Annex II - <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:225:0010:0013:EN:PDF>

RoHS - <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2003:037:0019:0023:EN:PDF>

WEEE - <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2003:037:0024:0038:EN:PDF>

## **Was copper beryllium recommended for inclusion in the most recent European Commission (EC) project to update RoHS?**

No. Article 6 of the RoHS Directive requires the EC to periodically evaluate the need to revise the list of substances covered by the RoHS Directive. In late 2007, the EC announced a project to evaluate other materials and contracted with the Öko-Institut e.V. to conduct the evaluation. The Öko-Institut e.V. listed beryllium and beryllium oxide for evaluation along with 44 other substances including antimony trioxide, antimony compounds, arsenic and compounds, cobalt, cobalt oxide, gallium arsenide, nickel and selenium.

Brush Wellman Inc. prepared and submitted information to Öko-Institut e.V. about beryllium metal, beryllium-containing alloys and beryllium oxide ceramics including the important uses of beryllium, copper beryllium and nickel beryllium alloys, and beryllium oxide ceramic in EEE, the relatively small use of beryllium (including in alloys) and beryllium oxide ceramic in EEE, the evidence of safe handling during

use, disposal and recycling, and the studies which indicate that beryllium is incorrectly classified as a carcinogen.

The Öko-Institut e.V. thoroughly evaluated all information submitted for beryllium and beryllium-containing materials as well as the other 44 substances. In its final report<sup>5</sup> issued to the EC on October 17, 2008, the Öko-Institut e.V. concluded that beryllium and beryllium oxide ceramic, and therefore copper beryllium and nickel beryllium alloys, did **not** "constitute significant health and environmental risks when used in electrical and electronic equipment" and therefore did **not** recommend these materials as potential candidates for inclusion into RoHS.

On December 3, 2009, the EC issued its proposal for recast of the RoHS Directive and the proposal does not include the addition of beryllium or beryllium oxide to the list of restricted substances in EEE nor does it include any requirements related to beryllium or beryllium oxide in EEE. The recast of RoHS is to be completed by the European Parliament and Council in early 2010 and become effective shortly thereafter. Based on the above, beryllium and beryllium oxide, as well as copper beryllium and nickel beryllium alloys, are expected to continue to be available for use in EEE.

### **Does the Joint Industry Guide for Material Composition Declaration in Electronic Products 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 Joint Industry Guide for Material Composition Declaration Guide in Electronic Products - Edition 2 ("JIG 101 Ed. 2")<sup>6</sup>. 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 copper beryllium, please see FAQ106 - Frequently Asked Questions about the Material Declaration of Copper Beryllium in Products.

### **How can Brush Wellman assist me?**

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 material safety data information, can be found at [www.brushwellman.com](http://www.brushwellman.com) or [www.brushalloy.com](http://www.brushalloy.com).

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

<sup>2</sup> 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).

<sup>3</sup> 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.

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

<sup>5</sup> Study on Hazardous Substances in Electrical and Electronic Equipment, Not Regulated by the RoHS Directive" issued by the Öko-Institut e.V. to the European Commission on October 17, 2008.

<sup>6</sup> Joint Industry Guide for Material Composition Declaration in Electronic Products (JIG 101 Ed.2.0) – April 28, 2009. Developed and published by Consumer Electronics Association (CEA®), DIGITALEUROPE and the Japanese Green Procurement Supply Standardization Initiative (JGPSSI).