



STAKEHOLDER CONSULTATION ON
ADAPTATION TO SCIENTIFIC AND TECHNICAL PROGRESS
UNDER DIRECTIVE 2002/95/EC ON THE
RESTRICTION OF THE USE OF CERTAIN HAZARDOUS
SUBSTANCES IN ELECTRICAL AND ELECTRONIC EQUIPMENT
FOR THE PURPOSE OF A POSSIBLE AMENDMENT OF THE ANNEX

EXEMPTION 6:

(Lead as an alloying element in steel containing up to 0,35 % lead by weight, aluminum containing up to 0,4 % lead by weight and as a copper alloy containing up to 4 % lead by weight.)

ADDITION to "Joint response from EICTA, AeA Europe, EECA ESIA and JBCE to the general and specific questionnaires" date 31 March 2008

9 May 2008, Brussels

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Executive summary

The Information and Communication Technologies industries associated in EICTA comprise among others also copiers, printers, scanners, peripheral equipment and printing media as well as document management software and innovative products in the areas of system integration focussed on document management (intended for professional use).

The application of the RoHS exemption 6 are essential for the design of reliable products with a long life time of functionality.

EICTA industry members are committed to converting all its bearing shells and bushes as well as its applied alloys to lead-free composition. However, there are major obstacles to use lead-free alternatives in mentioned professional applications with the same reliability and functioning performance as well as the difficulty of obtainability.

Therefore EICTA urgently asks the Commission to maintain mentioned RoHS exemptions till alternatives with the same functionality and performance will become obtainable.

Introduction

From 1 July 2006 all company equipment put on the market must be compliant with the EC Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the Restrictions of the use of certain Hazardous Substances in Electrical and Equipment (RoHS Directive). Through this directive the EU Member States must prevent and ensure that, new Electrical and Electronic Equipment (EEE) put on the market from 1 July 2006 does not contain certain Hazardous Substances. Additionally this directive includes a list of exemptions. All these exemptions are reviewed periodically every 4 years.

This document relates to the RoHS Exemption 6 and should be considered as an addition regarding the already sent out "Joint response from EICTA, AeA Europe, EECA ESIA and JCBE, to the general and specific questionnaires" dated 31 March 2008.

The Exemptions

Without these exemptions these parts may only contain up to 0,1% by weight of the following elements: Lead (Pb), Cadmium (Cd), Hexavalent Chromium (Cr6) and Mercury (Hg).

Exemption 6

"Lead as an alloying element in steel containing up to 0,35 % lead by weight, aluminum containing up to 0,4 % lead by weight and as a copper alloy containing up to 4 % lead by weight."

Engineering standards using this Exemption and application

Free-cutting brass

EN 12164 Amd1	Copper and copper alloys Rod for free machining purposes
JIS H 3250	Copper and copper alloys rods and bars
ASTM B16/B 16M	Specification for Free-Cutting Brass Rod, Bar and Shapes for use in Screw machines

These standards are applicable for the following kinds of applications.

- Bearings
- Shaft Fan
- Worm gear
- Gear wheel
- Constructions with heat conduction functionality
- Constructions with signal transmission
- Inserts in plastic parts



Status:

New design rules for alternative materials regarding free cutting brass for these applications are under investigation. Until now no alternatives with the same functionality and reliability concerning the Exemptions 6 are available.

Free-cutting steel

EN 10277 Bright steel products - Technical delivery condition - Part 3 Free cutting steel

JIS - G4804 Free cutting carbon steels

ISO 683 Heat-treatable steels, alloys steels and free cutting steels

These standards are applicable on the whole range of applications, as well as on bearings.

Status:

Based on investigations it is concluded that regarding Free-cutting steel for several applications no lead-free materials are usable with the same functionality and performance.

DIN1706 casting alloy

These standards are applicable for the following kinds of applications.

- Constructions with high stiffness
- Combining functionality in one part
- Constructions with low weight in consequence of less material
- Constructions for high volume production

Status:

So far the results of the investigations concerning the availability of lead-free alternatives regarding DIN1706 casting alloy, has been shown to be inconclusive. Until now the Exemptions 6 have to be maintained

Conclusion

Generally:

Exemption 6 has to be maintained for bearings in drives for paper transport, switch rods, gears, pulleys and gearboxes.

Brass:

Regarding brass there are no lead-free materials available with the same functionality and performance; so therefore exemptions 6 will stay necessary.

Free Cutting Steel:

Regarding free cutting steel for several applications no lead-free materials are usable with the same functionality and performance; so therefore exemptions 6 will stay necessary.

Casting alloys:

The results of the investigation of the casting alloys are inconclusive yet; this means that also for this application this exemption is necessary.