



Directive: RoHS Form No: 19 Version: 5

Category: 4

Keywords: maximum concentration values lead mercury  
cadmium hexavalent chromium PBB and PBDE

Directive reference: article 5.1(a) article 4.1  
article 2.3 annex

Submitted: 06/05/03 Adopted: 22/05/03 Updated:

**Subject:** *Maximum concentration values of lead, mercury, cadmium, hexavalent chromium, PBB and PBDE*

**Question:**

What are the maximum concentration values tolerated for the substances listed in article 4.1 in specific materials and components of EEE?

**Orgalime Position:**

The maximum concentration values of lead, mercury, cadmium, hexavalent chromium, PBB or PBDE tolerated in specific materials and components of EEE shall be as follows:

Lead 0.1% by weight  
Mercury 0.1% by weight  
Cadmium 0.01% by weight (1)  
Cr6+ 0.1% by weight  
PBB, PBDE 0.1% by weight (2)

Example:

A solder is lead-free if its content of lead does not exceed 0.1% by weight.

These values do not apply to the exemptions listed in article 2.3 and in the annex of the RoHS directive.

(1) consistent with Cadmium Directive 91/338/EEC

(2) consistent with Directive 2003/11/EC amending Directive 76/769/EEC relating to restrictions on the marketing and use of certain dangerous substances and preparations (PBDE, OBDE)

OK WEEE TF: 07/05/03 Origin: TF WEEE



Directive: **WEEE** Form No: **20** Version: **5**

Category: **4**

Keywords:

Directive reference:

Submitted:  Adopted:  Updated:

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**Subject:**

**Question:**

What are the criteria for equipment to be considered as falling within the scope of directive 2002/96/EC on waste electrical and electronic equipment and therefore covered by its provisions?

**Orgalime Position:**

A combined reading of articles 2.1, 2.3 [scope] and 3(a) [definition of electrical and electronic equipment] of directive 2002/96/EC on waste electrical and electronic equipment (WEEE) reveals six main criteria to be applied to equipment in order for it to be considered as falling within the scope of the directive:

Equipment, which

- 1.is dependent on electric currents or electromagnetic fields in order to work properly, and equipment for the generation, transfer and measurement of such currents and fields, and
- 2.falls under the categories set out in annex IA, and
- 3.is listed in Annex IB, and
- 4.is designed for use with a voltage rating not exceeding 1000 Volt for alternating current and 1500 Volt for direct current, and
- 5.is not a product which is intended for specifically military purposes, and
- 6.is not part of another type of equipment that does not fall under the scope of the directive.

Equipment that fulfils all of the above criteria is to be considered as being covered by directive 2002/96/EC.

This generic interpretative guideline shall serve as a basis for other Orgalime guidelines on specific appliances where further clarification is needed.

OK WEEE TF:  Origin:

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Directive: RoHS Form No: 23 Version: 2

Category: 4

Keywords: put on the market

Directive reference: article 4.1

Submitted: 18/02/03 Adopted: 01/04/03 Updated:

**Subject:** "Put on the market"

**Question:**

What is the definition of "put on the market" ?

**Orgalime Position:**

The definition of "put on the market" (see Article 4(1)) should be the same as that of "placed on the market" as defined in Clause 2.3 of "Guide to the implementation of directives based on the New Approach and the Global Approach":

"Placing on the market is the initial action of making a product available for the first time on the Community market, with a view to distribution or use in the Community. Making available can be either for payment or free of charge." This definition has been successfully applied to other Article 95 Directives.

OK WEEE TF: 27/02/03 Origin: GAMBICA



Directive: **WEEE** Form No: **30** Version: **2**

Category: **4**

Keywords: hydrocarbons treatment requirements

Directive reference: article 6 annex II (1)  
annex II (2)

Submitted: 04/03/03 Adopted: 22/05/03 Updated:

**Subject:** *Hydrocarbons ; treatment requirements*

**Question:**

Does the WEEE directive exempt hydrocarbons with a Global Warming Potential (GWP) below 15, notably used in refrigerators and freezers, from the treatment requirements of annex II?

**Orgalime Position:**

Yes, hydrocarbons with a GWP below 15, notably used in refrigerators and freezers, are exempted from the treatment requirements of annex II.

Annex II of the WEEE directive lists the substances that require selective treatment for materials and components of waste electrical and electronic equipment.

Annex II(1) says:

“as a minimum, the following substances, preparations and components have to be removed from any separately collected WEEE: [...] Chlorofluorocarbons (CFC), hydro-chlorofluorocarbons (HCFC) or hydro-fluorocarbons (HFC), hydrocarbons (HC)”.

Annex II(2) requires certain components that are separately collected to be treated in a certain way. Annex II(2) further explains how to treat the gases mentioned in Annex II:

“Equipment containing gases that are ozone depleting or have a global warming potential (GWP) above 15, such as those contained in foams and refrigeration circuits: the gases must be properly extracted and properly treated. Ozone-depleting gases must be treated in accordance with Regulation (EC) No 2037/2000 of the European Parliament and of the Council of 29 June 2000 on substances that deplete the ozone layer”.

Analysis:

Hydrocarbons used in refrigerators and freezers usually have a GWP far below 15. Such hydrocarbons are exempted from the selective treatment requirement of Annex II of the WEEE directive, i.e. they are exempted from recycling and extraction.

Reason:

It does not make environmental or economic sense to require that hydrocarbons with a GWP<15 are extracted from WEEE.

The limit of GWP 15 stems from the EU ECO label criteria for refrigerators and freezers, according to Commission decision 2000/40/EC.

Hydrocarbons are derived from LPG (liquefied petroleum gas) and as such are naturally occurring. Isobutane (refrigeration appliances) and propane (air conditioning equipment) are used as refrigerants in the cooling circuit. Cyclopentane (sometimes in combination with other HCs) is used as blowing agent in the foam for the insulation of the walls of refrigerators and freezers.

OK WEEE TF: 07/05/03 Origin: CECED



Directive: **RoHS** Form No: **44** Version: **2**

Category: **4**

Keywords:

Directive reference:

Submitted:  Adopted:  Updated:

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**Subject:**

**Question:**

Does the ban of heavy metals also apply to batteries?

**Orgalime Position:**

No, the ban of heavy metals does not apply to batteries.

According to article 4 of directive 2002/95/EC on the Restriction on the Use of Certain Hazardous Substances, "Member States shall ensure that, from 1 July 2006, new electrical and electronic equipment put on the market does not contain lead, mercury, cadmium [...]". This provision applies to electrical and electronic equipment covered by the RoHS directive (article 2 and annex).

Yet, the RoHS Directive does not apply to batteries: Article 2(2) clarifies that the directive "shall apply without prejudice to Community legislation on safety and health requirements and specific waste management legislation."

This is further explained in recital 9 of the Directive:

"This Directive should apply without prejudice to Community legislation on safety and health requirements and specific Community waste management legislation, in particular Council Directive 91/157/EEC of 18 March 1991 on batteries and accumulators containing dangerous substances."

OK WEEE TF:  Origin:

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