

**SUBSIDIARY LEGISLATION 427.57**

**RESTRICTION OF USE OF HAZARDOUS  
SUBSTANCES IN ELECTRICAL AND  
ELECTRONIC EQUIPMENT REGULATIONS**

1st January, 2013

*LEGAL NOTICE 84 of 2013, amended by Legal Notices 118 of 2014, 39, 347 of 2015, 391 of 2016 and 196 of 2018, 119 of 2019 and 185, 361 of 2020 and 388 of 2021.*

1. The title of these regulations is the Restriction of Use of Hazardous Substances in Electrical and Electronic Equipment Regulations. Citation.

2. (1) These regulations implement the requirements of Directive 2011/65/EU of the European Parliament and of the Council of 8th June 2011 on the Restriction of the Use of certain Hazardous Substances in Electrical Equipment (recast), as amended by Directives 2012/51/EU and 2011/65/EU of the European Parliament and of the Council of 10 October 2012 amending, for the purposes of adapting to technical progress, Annex III to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for applications containing cadmium and an exemption for applications containing lead. Scope and applicability.  
Amended by:  
L.N. 119 of 2019.

(1A) These regulations also implement the European Union legislation listed in Schedule VIII.

(2) These regulations lay down rules on the restriction of the use of hazardous substances in electrical and electronic equipment with a view to contributing to the protection of human health and the environment, including the environmentally sound recovery and disposal of waste electrical and electronic equipment and shall apply to electrical and electronic equipment falling within the categories set out in Schedule I.

(3) *Deleted by Legal Notice 119 of 2019.*

(4) These regulations shall apply without prejudice to the requirements of European Union legislation on safety and health, and on chemicals, in particular Regulation (EC) No 1907/2006, as well as the requirements of specific European Union waste management legislation.

(5) These regulations shall not apply to:

- (a) equipment which is necessary for the protection of the essential interests of the security of Member States, including arms, munitions and war material intended for specifically military purposes;
- (b) equipment designed to be sent into space;
- (c) equipment which is specifically designed, and is to be installed, as part of another type of equipment that is excluded or does not fall within the scope of these regulations, which can fulfil its function only if it is

part of that equipment, and which can be replaced only by the same specifically designed equipment;

- (d) large-scale stationary industrial tools;
- (e) large-scale fixed installations;
- (f) means of transport for persons or goods, excluding electric two-wheel vehicles which are not type-approved;
- (g) non-road mobile machinery made available exclusively for professional use;
- (h) active implantable medical devices;
- (i) photovoltaic panels intended to be used in a system that is designed, assembled and installed by professionals for permanent use at a defined location to produce energy from solar light for public, commercial, industrial and residential applications;
- (j) equipment specifically designed solely for the purposes of research and development only made available on a business-to-business basis;
- (k) pipe organs.

Implementation.  
Added by:  
L.N. 118 of 2014.  
Amended by:  
L.N. 39 of 2015.  
Substituted by:  
L.N. 196 of 2018.

**2A.** Deleted by Legal Notice 119 of 2019.

Definitions.  
Amended by:  
L.N. 118 of 2014;  
L.N. 119 of 2019.

**3.\*** In these regulations, unless the context otherwise requires:

"authorised representative" means any natural or legal person established within the European Union who has received a written mandate from a manufacturer to act on his behalf in relation to specified tasks;

"availability of a substitute" means the ability of a substitute to be manufactured and delivered within a reasonable period of time as compared with the time required for manufacturing and delivering the substances listed in Schedule II;

"active implantable medical device" means any active implantable medical device within the meaning of regulation 3 of the Active Implantable Medical Devices Regulations;

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"cables" means all cables with a rated voltage of less than 250 volts that serve as a connection or an extension to connect electrical and electronic equipment to the electrical outlet or to connect two or more electrical and electronic equipment to each other;

"CE marking" means a marking by which the manufacturer indicates that the product is in conformity with the applicable requirements set out in European Union harmonisation legislation

\*Comes into force on 1st July 2022.

providing for its affixing;

"competent authority" means Malta Competition and Consumer Affairs Authority established by the Malta Competition and Consumer Affairs Authority Act; Cap. 510

"conformity assessment" means the process demonstrating whether the requirements of these regulations relating to an electrical and electronic equipment, are met;

"dependent", within the context of the definition "electrical and electronic equipment" means the need of electric currents or electromagnetic fields to fulfil at least one intended function;

"distributor" means any natural or legal person in the supply chain, other than the manufacturer or the importer, who makes electrical and electronic equipment available on the market;

"economic operators" means the manufacturer, the authorised representative, the importer and the distributor;

"electrical and electronic equipment" means equipment which 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 designed for use with a voltage rating not exceeding 1000 volts for alternating current and 1500 volts for direct current;

"harmonised standard" means a standard adopted by one of the European standardisation bodies listed in Annex I to Directive 98/34/ EC of the European Parliament and of the Council of 22 June 1998 laying down a procedure for the provision of information in the field of technical standards and regulations and of rules on Information Society services on the basis of a request made by the Commission in accordance with Article 6 of Directive 98/34/EC;

"homogeneous material" means one material of uniform composition throughout or a material, consisting of a combination of materials, that cannot be disjointed or separated into different materials by mechanical actions such as unscrewing, cutting, crushing, grinding and abrasive processes;

"importer" means any natural or legal person established within the European Union, who places an electrical and electronic equipment from a third country on the European Union market;

"*in vitro* diagnostic medical device" means an *in vitro* diagnostic medical device within the meaning of regulation 3 of the *In Vitro* Diagnostic Medical Devices Regulations; S.L. 427.16.

"industrial monitoring and control instruments" means monitoring and control instruments designed for exclusively industrial or professional use;

"large-scale fixed installation" means a large-scale combination of several types of apparatus and, where applicable, other devices, which are assembled and installed by professionals, intended to be used permanently in a pre-defined and dedicated location, and deinstalled by professionals;

"large-scale stationary industrial tools" means a large-scale

assembly of machines, equipment, and, or components, functioning together for a specific application, permanently installed and deinstalled by professionals at a given place, and used and maintained by professionals in an industrial manufacturing facility or research and development facility;

"making available on the market" means any supply of electrical and electronic equipment for distribution, consumption or use on the European Union market in the course of a commercial activity, whether in return for payment or free of charge;

"manufacturer" means any natural or legal person who manufactures electrical and electronic equipment or who has electrical and electronic equipment designed or manufactured and markets it under his name or trademark;

"market surveillance" means the activities carried out and measures taken by the Division to ensure that electrical and electronic equipment complies with the requirements set out in these regulations and does not endanger health, safety or other issues of public interest protection;

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"medical device" means a medical device within the meaning of regulation 3 of the Medical Devices Regulations and includes electrical and electronic equipment;

"non-road mobile machinery made available exclusively for professional use" means machinery, with an on-board power source or with a traction drive powered by an external power source, the operation of which requires either mobility or continuous or semi-continuous movement between a succession of fixed working locations while working, and which is made available exclusively for professional use;

"placing on the market" means making available an electrical and electronic equipment on the European Union market for the first time;

"recall" means any measure aimed at achieving the return of a product that has already been made available to the end user;

"reliability of a substitute" means the probability that an electrical and electronic equipment using a substitute will perform a required function without failure under stated conditions for a stated period of time;

"spare part" means a separate part of an electrical and electronic equipment that can replace a part of an electrical and electronic equipment. The electrical and electronic equipment cannot function as intended without that part of the electrical and electronic equipment. The functionality of electrical and electronic equipment is restored or is upgraded when the part is replaced by a spare part;

Cap. 510.

"Technical Regulations Division" means the Technical Regulations Division established by article 19 of the Malta Competition and Consumer Affairs Authority Act, hereinafter referred to as "competent authority";

"technical specification" means a document that prescribes technical requirements to be fulfilled by a product, process or

service;

"waste electrical and electronic equipment" or "WEEE" means electrical and electronic equipment which is waste as defined in regulation 4 of the Waste Regulations, including all components, sub-assemblies and consumables which are part of the product at the time of discarding;

"withdrawal" means any measure aimed at preventing a product in the supply chain from being made available on the market.

4. (1) The competent authority shall ensure that electrical and electronic equipment placed on the market, including cables and spare parts for its repair, its reuse, updating of its functionalities or upgrading of its capacity, does not contain the substances listed in Schedule II.

Prevention.  
Amended by:  
L.N. 119 of 2019.

(2) For the purposes of these regulations, the maximum concentration value by weight in homogeneous materials as specified in Schedule II shall be tolerated.

(3) Sub-regulation (1) shall apply to medical devices and monitoring and control instruments which are placed on the market from 22 July 2014, to *in vitro* diagnostic medical devices which are placed on the market from 22 July 2016, to industrial monitoring and control instruments which are placed on the market from 22 July 2017, and to all other electrical and electronic equipment that was outside the scope of Directive 2002/95/EC and which is placed on the market from 22 July 2019.

(4) Sub-regulation (1) shall not apply to:

- (a) cables or spare parts for the repair, the reuse, the updating of functionalities or upgrading of capacity of the following:
  - (i) electrical and electronic equipment placed on the market before 1 July 2006;
  - (ii) medical devices placed on the market before 22 July 2014;
  - (iii) *in vitro* diagnostic medical devices placed on the market before 22 July 2016;
  - (iv) monitoring and control instruments placed on the market before 22 July 2014;
  - (v) industrial monitoring and control instruments placed on the market before 22 July 2017;
  - (vi) all other electrical and electronic equipment that was outside the scope of Directive 2002/95/EC and which is placed on the market before 22 July 2019;
  - (vii) electrical and electronic equipment which benefited from an exemption and which was placed on the market before that exemption expired as far as that specific exemption is concerned;
- (b) the following reused spare parts, provided that reuse takes place in auditable closed-loop business-to-business return systems, and that the reuse of spare parts is notified

to the consumer:

- (i) recovered from electrical and electronic equipment placed on the market before 1 July 2006 and used in electrical and electronic equipment placed on the market before 1 July 2016;
- (ii) recovered from medical devices or monitoring and control instruments placed on the market before 22 July 2014 and used in electrical and electronic equipment placed on the market before 22 July 2024;
- (iii) recovered from *in vitro* diagnostic medical devices placed on the market before 22 July 2016 and used in electrical and electronic equipment placed on the market before 22 July 2026;
- (iv) recovered from industrial monitoring and control instruments placed on the market before 22 July 2017 and used in electrical and electronic equipment placed on the market before 22 July 2027;
- (v) recovered from all other electrical and electronic equipment that was outside the scope of Directive 2002/95/EC and which is placed on the market before 22 July 2019, and used in electrical and electronic equipment placed on the market before 22 July 2029; and

(c) to the applications listed in Schedules III and IV.

Competent  
authority.  
Added by:  
L.N. 118 of 2014.

**4A.** (1) The competent authority shall ensure that users of EEE in private households are given the necessary information about the meaning of the symbol shown in Schedule VII.

(2) In order to enable the date upon which the EEE was placed on the market to be determined unequivocally, the competent authority shall ensure that a mark on the EEE specifies that the latter was placed on the market after 13 August 2005. Preferably, the European Standard EN 50419 shall be applied for this purpose.

(3) With a view to minimising the disposal of WEEE as unsorted municipal waste and to facilitating its separate collection, the competent authority shall ensure that producers appropriately mark - preferably in accordance with the European standard EN 50419 - EEE placed on the market with the symbol shown in Schedule VII. In exceptional cases, where this is necessary because of the size or the function of the product, the symbol shall be printed on the packaging, on the instructions for use and on the warranty of the EEE.

Obligations of  
manufacturers.

**5.** The competent authority shall ensure that all manufacturers:

- (a) ensure, when placing electrical and electronic

- equipment on the market, that the equipment has been designed and manufactured in accordance with the requirements set out in regulation 4;
- (b) draw up the required technical documentation and carry out the internal production control procedure in line with module A of Annex II to Decision No 768/2008/EC or have it carried out;
  - (c) draw up, where compliance of electrical and electronic equipment with the applicable requirements has been demonstrated by the procedure referred to in paragraph (b), an EU declaration of conformity and affix the CE marking on the finished product. Where other applicable European Union legislation requires the application of a conformity assessment procedure which is at least as stringent, compliance with the requirements of paragraph (b) may be demonstrated within the context of that procedure. A single technical documentation may be drawn up;
  - (d) keep the technical documentation and the EU declaration of conformity for ten years after the electrical and electronic equipment has been placed on the market;
  - (e) furthermore ensure that procedures are in place for series production to remain in conformity. Changes in product design or characteristics and changes in the harmonised standards or in technical specifications by reference to which conformity of electrical and electronic equipment is declared shall be adequately taken into account;
  - (f) keep a register of non-conforming electrical and electronic equipment and product recalls, and keep distributors informed thereof;
  - (g) furthermore ensure that their electrical and electronic equipment bears a type, batch or serial number or other element allowing its identification, or, where the size or nature of the electrical and electronic equipment does not allow it, that the required information is provided on the packaging or in a document accompanying the electrical and electronic equipment;
  - (h) indicate their name, registered trade name or registered trade mark and the address at which they can be contacted on the electrical and electronic equipment or, where that is not possible, on its packaging or in a document accompanying the electrical and electronic equipment. The address must indicate a single point at which the manufacturer can be contacted. Where other applicable European Union legislation contains provisions for the affixing of the manufacturer's name and address which are at least as stringent, those provisions shall apply;

- (i) who consider or have reason to believe that electrical and electronic equipment which they have placed on the market is not in conformity with these regulations, immediately take the necessary corrective measures to bring that electrical and electronic equipment into conformity, to withdraw it or recall it, if appropriate, and immediately inform the Division, giving details, in particular, of the non-compliance and of any corrective measures taken;
- (j) provide, further to a reasoned request from the Division, all the information and documentation necessary to demonstrate the conformity, with these regulations, of the electrical and electronic equipment in either Maltese or English, and that they cooperate with the Division at its request, on any action taken to ensure compliance with these regulations of electrical and electronic equipment which they have placed on the market.

Obligations of  
authorised  
representatives.

- 6. The competent authority shall ensure that:
  - (a) manufacturers have the possibility to appoint an authorised representative by written mandate. The obligations laid down in regulation 5(a) and the drawing up of technical documentation shall not form part of the authorised representative's mandate;
  - (b) authorised representatives perform the tasks specified in the mandate received from the manufacturer and the mandate shall specify, that authorised representatives:
    - (i) keep, at the disposal of the Division for ten years following the placing on the market of the electrical and electronic equipment, all EU declarations of conformity and technical documentation;
    - (ii) provide, further to a reasoned request from the Division, all the information and documentation necessary to demonstrate conformity with these regulations;
    - (iii) cooperate, at the request of the Division, on any action taken to ensure compliance with these regulations of all electrical and electronic equipment covered by their mandate.

Obligations of  
importers.

- 7. The competent authority shall ensure that all importers:
  - (a) place only electrical and electronic equipment which complies with these regulations on the European Union market;
  - (b) ensure, before placing an electrical and electronic equipment on the market, that the appropriate conformity assessment procedure has been carried out by the manufacturer, and that they further ensure that the manufacturer has drawn up the technical documentation, that the electrical and electronic



equipment bears the CE marking and is accompanied by the required documents, and that the manufacturer has complied with the requirements set out in regulation 5(f) and (g);

- (c) do not place any equipment on the market until the equipment has been brought in conformity with these regulations in the case where the importers consider or have reason to believe that the electrical and electronic equipment is not in conformity with regulation 4 and they shall inform the manufacturer and the Division to that effect;
- (d) indicate their name, registered trade name or registered trade mark and the address where they can be contacted, on the electrical and electronic equipment or, where this is not possible, on its packaging or in a document accompanying the electrical and electronic equipment. Where other applicable European Union legislation contains provisions regarding the affixing of the importer's name and address which they deem to be less stringent, those provisions shall apply;
- (e) keep, in order to ensure compliance with these regulations, a register of non-compliant electrical and electronic equipment and electrical and electronic equipment recalls, and keep distributors informed thereof;
- (f) who consider or have reason to believe that any electrical and electronic equipment which they have placed on the market is not in conformity with these regulations, immediately take the corrective measures necessary to bring that equipment in conformity with these regulations, to withdraw it or recall it, as appropriate, and immediately inform the Division, giving details, in particular, of the non-compliance and of any corrective measures taken;
- (g) keep, at the disposal of the Division for ten years following the placing on the market of the electrical and electronic equipment, a copy of the EU declaration of conformity and furthermore they must ensure that any technical documentation will be made available upon request;
- (h) provide, further to a reasoned request from the Division, all the information and documentation necessary to demonstrate the conformity with these regulations of the electrical and electronic equipment in either Maltese or English, and that they cooperate with the Division at its request, on any action taken to ensure compliance with these regulations of electrical and electronic equipment which they have placed on the market.

Obligations of distributors.

**8.** The competent authority shall ensure that distributors:

- (a) act, when making available on the market any electrical and electronic equipment, with due care in relation to the requirements applicable in particular by verifying that the electrical and electronic equipment bears the CE marking, that it is accompanied by the required documents in either Maltese or English, and that the manufacturer and the importer have complied with the requirements set out in regulation 5(g) and (h) and in regulation 7(d);
- (b) do not make available on the market any equipment, until the equipment has been brought in conformity with regulation 4 in the case where the distributors consider or have reason to believe that the electrical and electronic equipment is not in conformity with regulation 4 and they shall inform the manufacturer and the Division to that effect;
- (c) who consider or have reason to believe that electrical and electronic equipment which they have made available on the market is not in conformity with these regulations, make sure that the corrective measures necessary to bring that equipment in conformity with these regulations, to withdraw it or recall it, if appropriate, and immediately inform the Division, giving details, in particular, of the non-compliance and of any corrective measures taken;
- (d) provide, further to a reasoned request from the Division, all the information and documentation necessary to demonstrate the conformity, with these regulations, of the electrical and electronic equipment, and that they cooperate with the Division at its request, on any action taken to ensure compliance with these regulations of electrical and electronic equipment which they have made available on the market.

Obligations of manufacturers to apply to importers and distributors.

**9.** Importers or distributors shall be considered as manufacturers for the purposes of these regulations and shall furthermore be subject to the provisions of regulation 5 in the case where either of them has placed on the market electrical and electronic equipment under their names or trademarks or modified any electrical and electronic equipment which has already been placed on the market in such a way that compliance with the applicable requirements may be affected.

Identification of economic operators.

**10.** On request, all economic operators shall identify the following to the Division for ten years following the placing on the market of the electrical and electronic equipment:

- (a) any economic operator who has supplied them with electrical and electronic equipment;
- (b) any economic operator to whom they have supplied electrical and electronic equipment.

- 11.** (1) The EU declaration of conformity shall particularly specify that the requirements specified in regulation 4 have been observed and shall be made in the form and manner as provided in Schedule VI, either in Maltese or English. EU declaration of conformity.
- (2) Where other applicable European Union legislation requires the application of a conformity assessment procedure which is less stringent, compliance with the requirements of regulation 4(1) may be demonstrated within the context of that procedure. A single technical documentation may be drawn up.
- (3) By drawing up the EU declaration of conformity, the manufacturer shall assume responsibility for the compliance with these regulations of any electrical and electronic equipment.
- 12.** (1) CE markings shall be subject to the general principles set out in Article 30 of Regulation (EC) No 765/2008 and shall be: General principles of the CE marking.
- (a) affixed visibly, legibly and indelibly to the finished electrical and electronic equipment or to its data plate. Where this is not possible or not warranted on account of the nature of the electrical and electronic equipment, it shall be affixed to the packaging and to the accompanying documents;
- (b) duly affixed before the electrical and electronic equipment is placed on the market.
- (2) The Division shall build upon existing mechanisms to ensure the correct application of the regime governing the CE marking and take appropriate action in the event of improper use of the CE marking.
- 13.** (1) In the absence of evidence to the contrary, the Division shall presume electrical and electronic equipment bearing the CE marking to comply with these regulations. Presumption of conformity.
- (2) Materials, components and electrical and electronic equipment on which tests and measurements demonstrating compliance with the requirements of regulation 4 have been performed, or which have been assessed, in accordance with harmonised standards, the references of which have been published in the Official Journal of the European Union, shall be presumed to comply with the requirements of these regulations.
- 14.** (1) Where it is considered that a harmonised standard does not entirely satisfy the requirements which it covers and which are set out in regulation 4, the Division shall bring the matter before the Committee, set up pursuant to Article 5 of Directive 98/34/EC, giving its arguments, and requesting the Committee to deliver its opinion without delay, after consulting the relevant European standardisation bodies. Formal objection to a harmonised standard.
- (2) In the light of the Committee's opinion, the Division shall decide to publish, not to publish, to publish with restriction, to maintain, to maintain with restriction or to withdraw the references to the harmonised standard concerned.
- (3) On the basis of the Committee's opinion, the Commission

may inform the relevant European standardisation body and, if necessary, request the revision of the harmonised standards concerned.

Market  
surveillance.

**15.** The Division shall carry out market surveillances in accordance with Articles 15 to 29 of Regulation (EC) No 765/2008.

Offences and  
penalties.  
Cap. 427.

**16.** Any person who contravenes the provisions of these regulations shall be guilty of an offence and shall, on conviction, be liable to the penalties established by the Product Safety Act.

Schedule I

Categories of Electrical and Electronic Equipment covered by these regulations

1. Large household appliances
2. Small household appliances
3. IT and telecommunications equipment
4. Consumer equipment
5. Lighting equipment
6. Electrical and electronic tools
7. Toys, leisure and sports equipment
8. Medical devices
9. Monitoring and control instruments including industrial monitoring and control instruments
10. Automatic dispensers
11. Other Electrical and Electronic Equipment not covered by any of the categories above.

Schedule II

Restricted substances referred to in regulation 4(1)  
and maximum concentration values tolerated by  
weight in homogeneous materials

*Amended by:  
L.N. 347 of 2015;*

Lead (0,1%)

Mercury (0,1%)

Cadmium (0,01%)

Hexavalent chromium (0,1%)

Polybrominated biphenyls (PBB) (0,1%)

Polybrominated diphenyl ethers (PBDE) (0,1%)

Bis(2-ethylhexyl) phthalate (DEHP) (0,1%)

Butyl benzyl phthalate (BBP) (0,1%)

Dibutyl phthalate (DBP) (0,1%)

Diisobutyl phthalate (DIBP) (0,1%%)

The restriction of DEHP, BBP, DBP and DIBP shall apply to medical devices, including *in vitro* medical devices, and monitoring and control instruments, including industrial monitoring and control instruments, from 22 July 2021.

The restriction of DEHP, BBP, DBP and DIBP shall not apply to cables or spare parts for the repair, the reuse, the updating of functionalities or upgrading of capacity of EEE placed on the market before 22 July 2019, and of medical devices, including *in vitro* medical devices, and monitoring and control instruments,

including industrial monitoring and control instruments, placed on the market before 22 July 2021.

The restriction of DEHP, BBP and DBP shall not apply to toys which are already subject to the restriction of DEHP, BBP and DBP through entry 51 of Annex XVII to Regulation (EC) No 1907/2006.

## Schedule III

*Amended by:*  
*L.N. 118 of 2014;*  
*L.N. 39 of 2015;*  
*L.N. 196 of 2018;*  
*L.N. 119 of 2019;*  
*L.N. 185 of 2020;*  
*L.N. 361 of 2020;*  
*L.N. 388 of 2021.*

## Applications exempted from the restriction in regulation 4(1)

Exemption	Scope and dates of applicability
1. Mercury in single capped (compact) fluorescent lamps not exceeding (per burner):	
1(a) For general lighting purposes < 30 W: 5 mg	Expires on 31 December 2011; 3,5 mg may be used per burner after 31 December 2011 until 31 December 2012; 2,5 mg shall be used per burner after 31 December 2012
1(b) For general lighting purposes $\geq$ 30 W and < 50 W: 5 mg	Expires on 31 December 2011; 3,5 mg may be used per burner after 31 December 2011
1(c) For general lighting purposes $\geq$ 50 W and < 150 W: 5 mg	
1(d) For general lighting purposes $\geq$ 150 W: 15 mg	
1(e) For general lighting purposes with circular or square structural shape and tube diameter $\leq$ 17 mm	No limitation of use until 31 December 2011; 7 mg may be used per burner after 31 December 2011
1(f) For special purposes: 5 mg	
1(g) For general lighting purposes < 30 W with a lifetime equal or above 20 000 h: 3,5 mg	Expires on 31 December 2017
2(a) Mercury in double-capped linear fluorescent lamps for general lighting purposes not exceeding (per lamp):	
2(a)(1) Tri-band phosphor with normal lifetime and a tube diameter < 9 mm (e.g. T2): 5 mg	Expires on 31 December 2011; 4 mg may be used per lamp after 31 December 2011
2(a)(2) Tri-band phosphor with normal lifetime and a tube diameter $\geq$ 9 mm and $\leq$ 17 mm (e.g. T5): 5 mg	Expires on 31 December 2011; 3 mg may be used per lamp after 31 December 2011
2(a)(3) Tri-band phosphor with normal lifetime and a tube diameter > 17 mm and $\leq$ 28 mm (e.g. T8): 5 mg	Expires on 31 December 2011; 3,5 mg may be used per lamp after 31 December 2011

2(a)(4)	Tri-band phosphor with normal lifetime and a tube diameter > 28 mm (e.g. T12): 5 mg	Expires on 31 December 2012; 3,5 mg may be used per lamp after 31 December 2012
2(a)(5)	Tri-band phosphor with long lifetime ( $\geq 25\ 000$ h): 8 mg	Expires on 31 December 2011; 5 mg may be used per lamp after 31 December 2011
2(b)	Mercury in other fluorescent lamps not exceeding (per lamp):	
2(b)(1)	Linear halophosphate lamps with tube > 28 mm (e.g. T10 and T12): 10 mg	Expires on 13 April 2012
2(b)(2)	Non-linear halophosphate lamps (all diameters): 15 mg	Expires on 13 April 2016
2(b)(3)	Non-linear tri-band phosphor lamps with tube diameter > 17 mm (e.g. T9)	No limitation of use until 31 December 2011; 15 mg may be used per lamp after 31 December 2011
2(b)(4)	Lamps for other general lighting and special purposes (e.g. induction lamps)	No limitation of use until 31 December 2011; 15 mg may be used per lamp after 31 December 2011
3	Mercury in cold cathode fluorescent lamps and external electrode fluorescent lamps (CCFL and EEFL) for special purposes not exceeding (per lamp):	
3(a)	Short length ( $\leq 500$ mm)	No limitation of use until 31 December 2011; 3,5 mg may be used per lamp after 31 December 2011
3(b)	Medium length ( $> 500$ mm and $\leq 1\ 500$ mm)	No limitation of use until 31 December 2011; 5 mg may be used per lamp after 31 December 2011
3(c)	Long length ( $> 1\ 500$ mm)	No limitation of use until 31 December 2011; 13 mg may be used per lamp after 31 December 2011
4(a)	Mercury in other low pressure discharge lamps (per lamp)	No limitation of use until 31 December 2011; 15 mg may be used per lamp after 31 December 2011
4(b)	Mercury in High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner) in lamps with improved colour rendering index $R_a > 60$ :	
4(b)-I	$P \leq 155$ W	No limitation of use until 31 December 2011; 30 mg may be used per burner after 31 December 2011
4(b)-II	$155$ W $< P \leq 405$ W	No limitation of use until 31 December 2011; 40 mg may be used per burner after 31 December 2011
4(b)-III	$P > 405$ W	No limitation of use until 31 December 2011; 40 mg may be used per burner after 31 December 2011
4(c)	Mercury in other High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner):	
4(c)-I	$P \leq 155$ W	No limitation of use until 31 December 2011; 25 mg may be used per burner after 31 December 2011

4(c)-II	155 W < P ≤ 405 W	No limitation of use until 31 December 2011; 30 mg may be used per burner after 31 December 2011
4(c)-III	P > 405 W	No limitation of use until 31 December 2011; 40 mg may be used per burner after 31 December 2011
4(d)	Mercury in High Pressure Mercury (vapour) lamps (HPMV)	Expires on 13 April 2015
4(e)	Mercury in metal halide lamps (MH)	
4(f)	Mercury in other discharge lamps for special purposes not specifically mentioned in this Schedule	
4(g)	Mercury in hand crafted luminous discharge tubes used for signs, decorative or architectural and specialist lighting and light-artwork, where the mercury content shall be limited as follows: (a) 20 mg per electrode pair + 0,3 mg per tube length in cm, but not more than 80 mg, for outdoor applications and indoor applications exposed to temperatures below 20 °C; (b) 15 mg per electrode pair + 0,24 mg per tube length in cm, but not more than 80 mg, for all other indoor applications	Expires on 31 December 2018
5(a)	Lead in glass of cathode ray tubes	
5(b)	Lead in glass of fluorescent tubes not exceeding 0,2% by weight	
6(a)	Lead as an alloying element in steel for machining purposes and in galvanised steel containing up to 0,35% lead by weight	Expires on: — 21 July 2021 for categories 8 and 9 other than <i>in vitro</i> diagnostic medical devices and industrial monitoring and control instruments; — 21 July 2023 for category 8 <i>in vitro</i> diagnostic medical devices; — 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11.
6(a)-I	Lead as an alloying element in steel for machining purposes containing up to 0,35% lead by weight and in batch hot dip galvanised steel components containing up to 0,2% lead by weight	Expires on 21 July 2021 for categories 1-7 and 10.



6(b)	Lead as an alloying element in aluminium containing up to 0,4% lead by weight	Expires on: — 21 July 2021 for categories 8 and 9 other than <i>in vitro</i> diagnostic medical devices and industrial monitoring and control instruments, — 21 July 2023 for category 8 <i>in vitro</i> diagnostic medical devices, — 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11.
6(b)-I	Lead as an alloying element in aluminium containing up to 0,4% lead by weight, provided it stems from lead-bearing aluminium scrap recycling	Expires on 21 July 2021 for categories 1-7 and 10.
6(b)-II	Lead as an alloying element in aluminium for machining purposes with a lead content up to 0,4% by weight	Expires on 18 May 2021 for categories 1-7 and 10.
6(c)	Copper alloy containing up to 4% lead by weight	Expires on: — 21 July 2021 for categories 1-7 and 10, — 21 July 2021 for categories 8 and 9 other than <i>in vitro</i> diagnostic medical devices and industrial monitoring and control instruments, — 21 July 2023 for category 8 <i>in vitro</i> diagnostic medical devices, — 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11.
7(a)	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85% by weight or more lead)	Applies to categories 1-7 and 10 (except applications covered by item 24 of this Annex) and expires on 21 July 2021. For categories 8 and 9 other than <i>in vitro</i> diagnostic medical devices and industrial monitoring and control instruments expires on 21 July 2021. For category 8 <i>in vitro</i> diagnostic medical devices expires on 21 July 2023. For category 9 industrial monitoring and control instruments, and for category 11 expires on 21 July 2024.
7(b)	Lead in solders for servers, storage and storage array systems, network infrastructure equipment for switching, signalling, transmission, and network management for telecommunications	

7(c)-I	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezo-electronic devices, or in a glass or ceramic matrix compound	Applies to categories 1-7 and 10 (except applications covered under item 34) and expires on 21 July 2021. For categories 8 and 9 other than <i>in vitro</i> diagnostic medical devices and industrial monitoring and control instruments expires on 21 July 2021. For category 8 <i>in vitro</i> diagnostic medical devices expires on 21 July 2023. For category 9 industrial monitoring and control instruments, and for category 11 expires on 21 July 2024.
7(c)-II	Lead in dielectric ceramic in capacitors for a rated voltage of 125 V AC or 250 V DC or higher	Does not apply to applications covered by point 7(c)-I and 7(c)-IV of this Annex. Expires on: — 21 July 2021 for categories 1-7 and 10; — 21 July 2021 for categories 8 and 9 other than <i>in vitro</i> diagnostic medical devices and industrial monitoring and control instruments; — 21 July 2023 for category 8 <i>in vitro</i> diagnostic medical devices; — 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11.
7(c)-III	Lead in dielectric ceramic in capacitors for a rated voltage of less than 125 V AC or 250 V DC	Expires on 1 January 2013 and after that date may be used in spare parts for Electrical and Electronic Equipment placed on the market before 1 January 2013
7(c)-IV	Lead in PZT based dielectric ceramic materials for capacitors which are part of integrated circuits or discrete semiconductors	Expires on: — 21 July 2021 for categories 1-7 and 10; — 21 July 2021 for categories 8 and 9 other than <i>in vitro</i> diagnostic medical devices and industrial monitoring and control instruments; — 21 July 2023 for category 8 <i>in vitro</i> diagnostic medical devices; — 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11.
8(a)	Cadmium and its compounds in one shot pellet type thermal cut-offs	Expires on 1 January 2012 and after that date may be used in spare parts for Electrical and Electronic Equipment placed on the market before 1 January 2012

<p>8(b) Cadmium and its compounds in electrical contacts</p>	<p>Applies to categories 8, 9 and 11 and expires on:</p> <ul style="list-style-type: none"> <li>— 21 July 2021 for categories 8 and 9 other than <i>in vitro</i> diagnostic medical devices and industrial monitoring and control instruments;</li> <li>— 21 July 2023 for category 8 <i>in vitro</i> diagnostic medical devices;</li> <li>— 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11.</li> </ul>
<p>8(b)-I Cadmium and its compounds in electrical contacts used in:</p> <ul style="list-style-type: none"> <li>— circuit breakers,</li> <li>— thermal sensing controls,</li> <li>— thermal motor protectors (excluding hermetic thermal motor protectors),</li> <li>— AC switches rated at: <ul style="list-style-type: none"> <li>- 6 A and more at 250 V AC and more,</li> <li>or</li> <li>- 12 A and more at 125 V AC and more,</li> </ul> </li> <li>— DC switches rated at 20 A and more at 18 V DC and more, and</li> <li>— switches for use at voltage supply frequency <math>\geq 200</math> Hz.</li> </ul>	<p>Applies to categories 1 to 7 and 10 and expires on 21 July 2021.</p>
<p>9 Hexavalent chromium as an anti-corrosion agent of the carbon steel cooling system in absorption refrigerators up to 0,75% by weight in the cooling solution</p>	<p>Applies to categories 8, 9 and 11 and expires on:</p> <ul style="list-style-type: none"> <li>— 21 July 2021 for categories 8 and 9 other than <i>in vitro</i> diagnostic medical devices and industrial monitoring and control instruments,</li> <li>— 21 July 2023 for category 8 <i>in vitro</i> diagnostic medical devices,</li> <li>— 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11.</li> </ul>
<p>9(a)-I Up to 0,75% hexavalent chromium by weight, used as an anti-corrosion agent in the cooling solution of carbon steel cooling systems of absorption refrigerators (including minibars) designed to operate fully or partly with electrical heater, having an average utilised power input &lt;75W at constant running conditions</p>	<p>Applies to categories 1-7 and 10 and expires on 5 March 2021.</p>

<p>9(a)-II Up to 0,75% hexavalent chromium by weight, used as an anti-corrosion agent in the cooling solution of carbon steel cooling systems of absorption refrigerators:</p> <ul style="list-style-type: none"> <li>— designed to operate fully or partly with electrical heater, having an average utilised power input <math>\geq 75\text{W}</math> at constant running conditions,</li> <li>— designed to fully operate with non-electrical heater.</li> </ul>	<p>Applies to categories 1-7 and 10 and expires on 21 July 2021.</p>
<p>9(b) Lead in bearing shells and bushes for refrigerant-containing compressors for heating, ventilation, air conditioning and refrigeration (HVACR) applications</p>	<p>Applies to categories 8, 9 and 11; expires on:</p> <ul style="list-style-type: none"> <li>— 21 July 2023 for category 8 <i>in vitro</i> diagnostic medical devices,</li> <li>— 21 July 2024 for category 9 industrial monitoring and control instruments and for category 11,—</li> <li>21 July 2021 for other subcategories of categories 8 and 9.</li> </ul>
<p>9(b)-(I) Lead in bearing shells and bushes for refrigerant-containing hermetic scroll compressors with a stated electrical power input equal or below 9 kW for heating, ventilation, air conditioning and refrigeration (HVACR) applications</p>	<p>Applies to category 1; expires on 21 July 2019.</p>
<p>11(a) Lead used in C-press compliant pin connector systems</p>	<p>May be used in spare parts for Electrical and Electronic Equipment placed on the market before 24 September 2010</p>
<p>11(b) Lead used in other than C-press compliant pin connector systems</p>	<p>Expires on 1 January 2013 and after that date may be used in spare parts for Electrical and Electronic Equipment placed on the market before 1 January 2013</p>
<p>12 Lead as a coating material for the thermal conduction module C-ring</p>	<p>May be used in spare parts for Electrical and Electronic Equipment placed on the market before 24 September 2010</p>
<p>13(a) Lead in white glasses used for optical applications</p>	<p>Applies to all categories; expires on:</p> <ul style="list-style-type: none"> <li>— 21 July 2023 for category 8 <i>in vitro</i> diagnostic medical devices;</li> <li>— 21 July 2024 for category 9 industrial monitoring and control instruments and for category 11;</li> <li>— 21 July 2021 for all other categories and subcategories</li> </ul>

13(b)	Cadmium and lead in filter glasses and glasses used for reflectance standards	Applies to categories 8, 9 and 11; expires on: — 21 July 2023 for category 8 <i>in vitro</i> diagnostic medical devices; — 21 July 2024 for category 9 industrial monitoring and control instruments and for category 11; — 21 July 2021 for other subcategories of categories 8 and 9.
13(b)-(I)	Lead in ion coloured optical filter glass types	Applies to categories 1 to 7 and 10; expires on 21 July 2021 for categories 1 to 7 and 10.
13(b)-(II)	Cadmium in striking optical filter glass types; excluding applications falling under point 39 of this Annex	Applies to categories 1 to 7 and 10; expires on 21 July 2021 for categories 1 to 7 and 10.
13(b)-(III)	Cadmium and lead in glazes used for reflectance standards	Applies to categories 1 to 7 and 10; expires on 21 July 2021 for categories 1 to 7 and 10.
14	Lead in solders consisting of more than two elements for the connection between the pins and the package of microprocessors with a lead content of more than 80% and less than 85% by weight	Expired on 1 January 2011 and after that date may be used in spare parts for Electrical and Electronic Equipment placed on the market before 1 January 2011
15	Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit flip chip packages	Applies to categories 8, 9 and 11 and expires on: — 21 July 2021 for categories 8 and 9 other than <i>in vitro</i> diagnostic medical devices and industrial monitoring and control instruments; — 21 July 2023 for category 8 <i>in vitro</i> diagnostic medical devices; — 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11.
15(a)	Lead in solders to complete a viable electrical connection between the semi-conductor die and carrier within integrated circuit flip chip packages where at least one of the following criteria applies:  — a semi conductor technology node of 90nm or larger; — a single die of 300mm <sup>2</sup> or larger in any semi conductor technology node; — stacked die packages with die of 300mm <sup>2</sup> or larger, or silicon interposers of 300mm <sup>2</sup> or larger.	Applies to categories 1 to 7 and 10 and expires on 21 July 2021.
16	Lead in linear incandescent lamps with silicate coated tubes	Expires on 1 September 2013
17	Lead halide as radiant agent in high intensity discharge (HID) lamps used for professional reprography applications	

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18(a)	Lead as activator in the fluorescent powder (1% lead by weight or less) of discharge lamps when used as speciality lamps for diazoprinting reprography, lithography, insect traps, photochemical and curing processes containing phosphors such as SMS ((Sr,Ba) 2 MgSi 2 O 7 :Pb)	Expired on 1 January 2011
18(b)	Lead as activator in the fluorescent powder (1% lead by weight or less) of discharge lamps when used as sun tanning lamps containing phosphors such as BSP (BaSi <sub>2</sub> O <sub>5</sub> :Pb)	Expires on: — 21 July 2021 for categories 1-7 and 10; — 21 July 2021 for categories 8 and 9 other than <i>in vitro</i> diagnostic medical devices and industrial monitoring and control instruments; — 21 July 2023 for category 8 <i>in vitro</i> diagnostic medical devices; — 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11.
18(b)-I	Lead as activator in the fluorescent powder (1% lead by weight or less) of discharge lamps containing phosphors such as BSP (BaSi <sub>2</sub> O <sub>5</sub> :Pb) when used in medical phototherapy equipment	Applies to categories 5 and 8, excluding applications covered by entry 34 of Annex IV, and expires on 21 July 2021.
19	Lead with PbBiSn-Hg and PbInSn-Hg in specific compositions as main amalgam and with PbSn-Hg as auxiliary amalgam in very compact energy saving lamps (ESL)	Expires on 1 June 2011
20	Lead oxide in glass used for bonding front and rear substrates of flat fluorescent lamps used for Liquid Crystal Displays (LCDs)	Expires on 1 June 2011
21	Lead and cadmium in printing inks for the application of enamels on glasses, such as borosilicate and soda lime glasses	Applies to categories 8, 9 and 11 and expires on: — 21 July 2021 for categories 8 and 9 other than <i>in vitro</i> diagnostic medical devices and industrial monitoring and control instruments; — 21 July 2023 for category 8 <i>in vitro</i> diagnostic medical devices; — 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11.
21(a)	Cadmium when used in colour printed glass to provide filtering functions, used as a component in lighting applications installed in displays and control panels of EEE	Applies to categories 1 to 7 and 10 except applications covered by entry 21(b) or entry 39 and expires on 21 July 2021.
21(b)	Cadmium in printing inks for the application of enamels on glasses, such as borosilicate and soda lime glasses	Applies to categories 1 to 7 and 10 except applications covered by entry 21(a) or entry 39 and expires on 21 July 2021.

21(c)	Lead in printing inks for the application of enamels on other than borosilicate glasses	Applies to categories 1 to 7 and 10 and expires on 21 July 2021.
23	Lead in finishes of fine pitch components other than connectors with a pitch of 0,65 mm and less	May be used in spare parts for Electrical and Electronic Equipment placed on the market before 24 September 2010
24	Lead in solders for the soldering to machined through hole discoidal and planar array ceramic multilayer capacitors	Expires on: — 21 July 2021 for categories 1-7 and 10, — 21 July 2021 for categories 8 and 9 other than <i>in vitro</i> diagnostic medical devices and industrial monitoring and control instruments, — 21 July 2023 for category 8 <i>in vitro</i> diagnostic medical devices, — 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11.
25	Lead oxide in surface conduction electron emitter displays (SED) used in structural elements, notably in the seal frit and frit ring	
26	Lead oxide in the glass envelope of black light blue lamps	Expires on 1 June 2011
27	Lead alloys as solder for transducers used in high-powered (designated to operate for several hours at acoustic power levels of 125 dB SPL and above) loudspeakers	Expired on 24 September 2010
29	Lead bound in crystal glass as defined in First Schedule (Categories 1, 2, 3 and 4) of the Crystal Glass Order (S.L. 427.04)	Expires on: — 21 July 2021 for categories 1-7 and 10; — 21 July 2021 for categories 8 and 9 other than <i>in vitro</i> diagnostic medical devices and industrial monitoring and control instruments; — 21 July 2023 for category 8 <i>in vitro</i> diagnostic medical devices; — 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11.
30	Cadmium alloys as electrical/mechanical solder joints to electrical conductors located directly on the voice coil in transducers used in high-powered loudspeakers with sound pressure levels of 100 dB (A) and more	
31	Lead in soldering materials in mercury free flat fluorescent lamps (which, e.g. are used for liquid crystal displays, design or industrial lighting)	

32	Lead oxide in seal frit used for making window assemblies for Argon and Krypton laser tubes	Expires on: — 21 July 2021 for categories 1-7 and 10; — 21 July 2021 for categories 8 and 9 other than <i>in vitro</i> diagnostic medical devices and industrial monitoring and control instruments; — 21 July 2023 for category 8 <i>in vitro</i> diagnostic medical devices; — 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11.
33	Lead in solders for the soldering of thin copper wires of 100 µm diameter and less in power transformers	
34	Lead in cermet-based trimmer potentiometer elements	Applies to all categories; expires on: — 21 July 2021 for categories 1-7 and 10, — 21 July 2021 for categories 8 and 9 other than <i>in vitro</i> diagnostic medical devices and industrial monitoring and control instruments, — 21 July 2023 for category 8 <i>in vitro</i> diagnostic medical devices, — 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11.
36	Mercury used as a cathode sputtering inhibitor in DC plasma displays with a content up to 30 mg per display	Expired on 1 July 2010
37	Lead in the plating layer of high voltage diodes on the basis of a zinc borate glass body	Expires on: — 21 July 2021 for categories 1-7 and 10; — 21 July 2021 for categories 8 and 9 other than <i>in vitro</i> diagnostic medical devices and industrial monitoring and control instruments; — 21 July 2023 for category 8 <i>in vitro</i> diagnostic medical devices; — 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11.
38	Cadmium and cadmium oxide in thick film pastes used on aluminium bonded beryllium oxide	
39**	Cadmium selenide in downshifting cadmium-based semiconductor nanocrystal quantum dots for use in display lighting applications (< 0,2 µg Cd per mm <sup>2</sup> of display screen area)	Expires for all categories on 31 October 2019.



40	Cadmium in photoresistors for analogue optocouplers applied in professional audio equipment	Expires on 31 December 2013
41	Lead in solders and termination finishes of electrical and electronic components and finishes of printed circuit boards used in ignition modules and other electrical and electronic engine control systems, which for technical reasons must be mounted directly on or in the crankcase or cylinder of hand-held combustion engines (classes SH:1, SH:2, SH:3 of Directive 97/68/EC of the European Parliament and of the Council (*))	<p>Applies to all categories and expires on:</p> <ul style="list-style-type: none"> <li>— 31 March 2022 for categories 1 to 7, 10 and 11;</li> <li>— 21 July 2021 for categories 8 and 9 other than <i>in vitro</i> diagnostic medical devices and industrial monitoring and control instruments;</li> <li>— 21 July 2023 for category 8 <i>in vitro</i> diagnostic medical devices;</li> <li>— 21 July 2024 for category 9 industrial monitoring and control instruments</li> </ul>
42	<p>Lead in bearings and bushes of diesel or gaseous fuel powered internal combustion engines applied in non-road professional use equipment:</p> <ul style="list-style-type: none"> <li>— with engine total displacement <math>\geq</math> 15 litres;</li> </ul> <p>or</p> <ul style="list-style-type: none"> <li>— with engine total displacement <math>&lt;</math> 15 litres and the engine is designed to operate in applications where the time between signal to start and full load is required to be less than 10 seconds; or regular maintenance is typically performed in a harsh and dirty outdoor environment, such as mining, construction, and agriculture applications.</li> </ul>	<p>Applies to category 11, excluding applications covered by entry 6(c) of this Annex.</p> <p>Expires on 21 July 2024.</p>

<p>43 Bis(2-ethylhexyl) phthalate in rubber components in engine systems, designed for use in equipment that is not intended solely for consumer use and provided that no plasticised material comes into contact with human mucous membranes or into prolonged contact with human skin and the concentration value of bis(2-ethylhexyl) phthalate does not exceed:</p> <ul style="list-style-type: none"> <li>(a) 30% by weight of the rubber for <ul style="list-style-type: none"> <li>(i) gasket coatings;</li> <li>(ii) solid-rubber gaskets; or</li> <li>(iii) rubber components included in assemblies of at least three components using electrical, mechanical or hydraulic energy to do work, and attached to the engine.</li> </ul> </li> <li>(b) 10% by weight of the rubber for rubber-containing components not referred to in point (a).</li> </ul> <p>For the purposes of this entry, "prolonged contact with human skin" means continuous contact of more than 10 minutes duration or intermittent contact over a period of 30 minutes, per day</p>	<p>Applies to category 11 and expires on 21 July 2024.</p>
<p>44 Lead in solder of sensors, actuators, and engine control units of combustion engines within the scope of Regulation (EU) 2016/1628 of the European Parliament and of the Council***, installed in equipment used at fixed positions while in operation which is designed for professionals, but also used by non-professional users</p>	<p>Applies to category 11 and expires on 21 July 2024.</p>
<p>45 Lead diazide, lead styphnate, lead dipicramate, orange lead (lead tetroxide), lead dioxide in electric and electronic initiators of explosives for civil (professional) use and barium chromate in long time pyrotechnic delay charges of electric initiators of explosives for civil (professional) use</p>	<p>Applies to category 11 and expires on 20 April 2026.</p>

(*)	Directive 97/68/EC of the European Parliament and of the Council of 16 December 1997 on the approximation of the laws of the Member States relating to measures against the emission of gaseous and particulate pollutants from internal combustion engines to be installed in non-road mobile machinery (OJ L 59, 27.2.1998, p. 1).
(**)	Applicable as from 21st November, 2018.
(***)	Regulation (EU) 2016/1628 of the European Parliament and of the Council of 14 September 2016 on requirements relating to gaseous and particulate pollutant emission limits and type-approval for internal combustion engines for non-road mobile machinery, amending Regulations (EU) No 1024/2012 and (EU) No 167/2013, and amending and repealing Directive 97/68/EC (OJ L 252, 16.9.2016, p. 53)

*Amended by:*  
*L.N. 118 of 2014;*  
*L.N. 39 of 2015;*  
*L.N. 347 of 2015;*  
*L.N. 391 of 2016;*  
*L.N. 119 of 2019;*  
*L.N. 361 of 2020.*

#### Schedule IV

Applications exempted from the restriction in regulation 4(1) specific to  
medical devices and monitoring and control instruments

##### Equipment utilising or detecting ionising radiation

1. Lead, cadmium and mercury in detectors for ionising radiation.
2. Lead bearings in X-ray tubes.
3. Lead in electromagnetic radiation amplification devices: micro-channel plate and capillary plate.
4. Lead in glass frit of X-ray tubes and image intensifiers and lead in glass frit binder for assembly of gas lasers and for vacuum tubes that convert electromagnetic radiation into electrons.
5. Lead in shielding for ionising radiation.
6. Lead in X-ray test objects.
7. Lead stearate X-ray diffraction crystals.
8. Radioactive cadmium isotope source for portable X-ray fluorescence spectrometers.

##### Sensors, detectors and electrodes

- 1a. Lead and cadmium in ion selective electrodes including glass of pH electrodes.
- 1b. Lead anodes in electrochemical oxygen sensors.
- 1c. Lead, cadmium and mercury in infra-red light detectors.
- 1d. Mercury in reference electrodes: low chloride mercury chloride, mercury sulphate and mercury oxide.

##### Others

9. Cadmium in helium-cadmium lasers.
10. Lead and cadmium in atomic absorption spectroscopy lamps.

11. Lead in alloys as a superconductor and thermal conductor in MRI.
12. Lead and cadmium in metallic bonds creating superconducting magnetic circuits in MRI, SQUID, NMR (Nuclear Magnetic Resonance) or FTMS (Fourier Transform Mass Spectrometer) detectors. Expires on 30 June 2021.
13. Lead in counterweights.
14. Lead in single crystal piezoelectric materials for ultrasonic transducers.
15. Lead in solders for bonding to ultrasonic transducers.
16. Mercury in very high accuracy capacitance and loss measurement bridges and in high frequency RF switches and relays in monitoring and control instruments not exceeding 20 mg of mercury per switch or relay.
17. Lead in solders in portable emergency defibrillators.
18. Lead in solders of high performance infrared imaging modules to detect in the range 8-14  $\mu\text{m}$ .
19. Lead in Liquid crystal on silicon (LCoS) displays.
20. Cadmium in X-ray measurement filters.
21. Cadmium in phosphor coatings in image intensifiers for X-ray images until 31 December 2019 and in spare parts for X-ray systems placed on the EU market before 1 January 2020.
22. Lead acetate marker for use in stereotactic head frames for use with CT and MRI and in positioning systems for gamma beam and particle therapy equipment. Expires on 30 June 2021.
23. Lead as an alloying element for bearings and wear surfaces in medical equipment exposed to ionising radiation. Expires on 30 June 2021.
24. Lead enabling vacuum tight connections between aluminium and steel in X-ray image intensifiers. Expires on 31 December 2019.
25. Lead in the surface coatings of pin connector systems requiring nonmagnetic connectors which are used durably at a temperature below  $-20^{\circ}\text{C}$  under normal operating and storage conditions. Expires on 30 June 2021.
26. Lead in the following applications that are used durably at a temperature below  $-20^{\circ}\text{C}$  under normal operating and storage conditions:
  - (a) solders on printed circuit boards;
  - (b) termination coatings of electrical and electronic components and coatings of printed circuit boards;
  - (c) solders for connecting wires and cables;
  - (d) solders connecting transducers and sensors. Lead in solders of electrical connections to temperature measurement sensors in devices which are designed to be used periodically at temperatures below  $-150^{\circ}\text{C}$ . These exemptions expire on 30 June 2021.
27. Lead in
  - solders,
  - termination coatings of electrical and electronic components and printed circuit boards,
  - connections of electrical wires, shields and enclosed connectors,

which are used in

- (a) magnetic fields within the sphere of 1 m radius around the isocentre of the magnet in medical magnetic resonance imaging equipment, including patient monitors designed to be used within this sphere, or
  - (b) magnetic fields within 1 m distance from the external surfaces of cyclotron magnets, magnets for beam transport and beam direction control applied for particle therapy. Expires on 30 June 2020.
28. Lead in solders for mounting cadmium telluride and cadmium zinc telluride digital array detectors to printed circuit boards. Expires on 31 December 2017.
29. Lead in alloys, as a superconductor or thermal conductor, used in cryo-cooler cold heads and/or in cryo-cooled cold probes and/or in cryo-cooled equipotential bonding systems, in medical devices (category 8) and/or in industrial monitoring and control instruments. Expires on 30 June 2021.
30. Hexavalent chromium in alkali dispensers used to create photocathodes in X-ray image intensifiers until 31 December 2019 and in spare parts for X-ray systems placed on the EU market before 1 January 2020.
31. Lead, cadmium, hexavalent chromium, and polybrominated diphenyl ethers (PBDE) in spare parts recovered from and used for the repair or refurbishment of medical devices, including *in vitro* diagnostic medical devices, or electron microscopes and their accessories, provided that the reuse takes place in auditable closed-loop business-to-business return systems and that each reuse of parts is notified to the customer. Expires on 21 July 2021 for the use in medical devices other than *in vitro* diagnostic medical device, expires on 21 July 2023 for the use *in vitro* diagnostic medical devices and expires on 21 July 2024 for the use in electron microscopes and their accessories.
32. Lead in solders on printed circuit boards of detectors and data acquisition units for Positron Emission Tomographs which are integrated into Magnetic Resonance Imaging equipment. Expires on 31 December 2019.
33. Lead in solders on populated printed circuit boards used in Directive 93/42/EEC class IIa and IIb mobile medical devices other than portable emergency defibrillators. Expires on 30 June 2016 for class IIa and on 31 December 2020 for class IIb.'
34. Lead as an activator in the fluorescent powder of discharge lamps when used for extracorporeal photopheresis lamps containing BSP (BaSi 2 O 5 :Pb) phosphors. Expires on 22 July 2021.
35. Mercury in cold cathode fluorescent lamps for back-lighting liquid crystal displays, not exceeding 5 mg per lamp, used in industrial monitoring and control instruments placed on the market before 22 July 2017. - Expires on 21 July 2024.
36. Lead used in other than C-press compliant pin connector systems for industrial monitoring and control instruments. Expires on 31 December 2020. May be used after that date in spare parts for industrial monitoring and control instruments placed on the market before 1 January 2021.
37. Lead in platinized platinum electrodes used for conductivity measurements where at least one of the following conditions applies:
- (a) wide-range measurements with a conductivity range covering more than 1 order of magnitude (e.g. range between 0,1mS/m and 5mS/m) in laboratory applications for unknown concentrations;
  - (b) measurements of solutions where an accuracy of +/- 1% of the sample

range and where high corrosion resistance of the electrode are required for any of the following:

- (i) solutions with an acidity <pH 1;
  - (ii) solutions with an alkalinity >pH 13;
  - (iii) corrosive solutions containing halogen gas;
- (c) measurements of conductivities above 100mS/m that must be performed with portable instruments.

Expires on 31 December 2025.

38. Lead in solder in one interface of large area stacked die elements with more than 500 interconnects per interface which are used in X-ray detectors of computed tomography and X-ray systems. Expires on 31 December 2019. May be used after that date in spare parts for CT and X-ray systems placed on the market before 1 January 2020.

39. Lead in micro-channel plates (MCPs) used in equipment where at least one of the following properties is present:

- (a) a compact size of the detector for electrons or ions, where the space for the detector is limited to a maximum of 3mm/MCP (detector thickness + space for installation of the MCP), a maximum of 6mm in total, and an alternative design yielding more space for the detector is scientifically and technically impracticable;
- (b) a two-dimensional spatial resolution for detecting electrons or ions, where at least one of the following applies:
  - (i) a response time shorter than 25ns;
  - (ii) a sample detection area larger than 149mm<sup>2</sup>;
  - (iii) a multiplication factor larger than  $1,3 \times 10^3$ ;
- (c) a response time shorter than 5ns for detecting electrons or ions;
- (d) a sample detection area larger than 314mm<sup>2</sup> for detecting electrons or ions;
- (e) a multiplication factor larger than  $4,0 \times 10^7$ .

The exemption expires on the following dates:

- (a) 21 July 2021 for medical devices and monitoring and control instruments;
- (b) 21 July 2023 for *in vitro* diagnostic medical devices;
- (c) 21 July 2024 for industrial monitoring and control instruments.

40. Lead in dielectric ceramic in capacitors for a rated voltage of less than 125 V AC or 250 V DC for industrial monitoring and control instruments. Expires on 31 December 2020. May be used after that date in spare parts for industrial monitoring and control instruments placed on the market before 1 January 2021.

41. Lead as a thermal stabiliser in polyvinyl chloride (PVC) used as base material in amperometric, potentiometric and conductometric electrochemical sensors which are used in *in vitro* diagnostic medical devices for the analysis of blood and other body fluids and body gases. Expires on 31 March 2022.

42. Mercury in electric rotating connectors used in intravascular ultrasound imaging systems capable of high operating frequency (> 50 MHz) modes of operation. Expires on

30 June 2019.

43. Cadmium anodes in Hersch cells for oxygen sensors used in industrial monitoring and control instruments, where sensitivity below 10ppm is required. Expires on 15 July 2023.

44. Cadmium in radiation tolerant video camera tubes designed for cameras with a centre resolution greater than 450 TV lines which are used in environments with ionising radiation exposure exceeding 100 Gy/hour and a total dose in excess of 100kGy. Applies to category 9. Expires on 31 March 2027.

#### Schedule V

Applications for granting, renewing and revoking exemptions as referred to in Article 5 of Directive 2011/65/EU

Applications for exemptions, renewal of exemptions or, *mutatis mutandis*, for revoking an exemption may be submitted by a manufacturer, the authorised representative of a manufacturer, or any economic operator in the supply chain and shall include at least the following:

- (a) the name, address and contact details of the applicant;
- (b) information on the material or component and the specific uses of the substance in the material and component for which an exemption, or its revocation, is requested and its particular characteristics;
- (c) verifiable and referenced justification for an exemption, or its revocation, in line with the conditions established in Article 5;
- (d) an analysis of possible alternative substances, materials or designs on a life-cycle basis, including, when available, information about independent research, peer-review studies and development activities by the applicant and an analysis of the availability of such alternatives;
- (e) information on the possible preparation for reuse or recycling of materials from waste Electrical and Electronic Equipment, and on the provisions relating to the appropriate treatment of waste according to Schedule 2 of the Waste Management (Electrical and Electronic Equipment) Regulations, 2007 (S.L. 504.75).
- (f) other relevant information;
- (g) the proposed actions to develop, request the development and, or to apply possible alternatives including a timetable for such actions by the applicant;
- (h) where appropriate, an indication of the information which should be regarded as proprietary accompanied by verifiable justification;
- (i) when applying for an exemption, proposal for a precise and clear wording for the exemption;
- (j) a summary of the application.

#### Schedule VI

##### EU Declaration of Conformity

1. No ..... (unique identification of the Electrical and Electronic Equipment):
2. Name and address of the manufacturer or his authorised representative:
3. This declaration of conformity is issued under the sole responsibility of the manufacturer (or installer):

4. Object of the declaration (identification of Electrical and Electronic Equipment allowing traceability. It may include a photograph, where appropriate):
5. The object of the declaration described above is in conformity with Directive 2011/65/EU 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:
6. Where applicable, references to the relevant harmonised standards used or references to the technical specifications in relation to which conformity is declared:
7. Additional information:

Signed for and on behalf of:

(place and date of issue):

(name, function) (signature):

\_\_\_\_\_

*Added by:  
L.N. 118 of 2014.*

#### Schedule VII

The symbol indicating separate collection for EEE consists of the crossed-out wheeled bin, as shown below. The symbol must be printed visibly, legibly and indelibly.



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*Added by:*

*L.N. 119 of 2019;*

*Amended by:*

*L.N.185 of 2020;*

*L.N. 361 of 2020;*

*L.N. 388 of 2021.*

Schedule VIII

List of European Union legislation transposed by these  
regulations [Regulation 2(1A)]

- The requirements of Article 14(2)(e), Article 14(4), Article 15(2) and Annex IX of Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE) (recast).
- Commission Delegated Directive 2014/1/EU of 18 October 2013 amending, for the purposes of adapting to technical progress, the Annex IV to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead as an alloying element for bearings and wear surfaces in medical equipment exposed to ionising radiation.
- Commission Delegated Directive 2014/2/EU of 18 October 2013 amending, for the purposes of adapting to technical progress, the Annex IV to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for cadmium in phosphor coatings in image intensifiers for X-ray images until 31 December 2019 and in spare parts for X-ray systems placed on the EU market before 1 January 2020.
- Commission Delegated Directive 2014/3/EU of 18 October 2013 amending, for the purposes of adapting to technical progress, the Annex IV to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead acetate marker for use in stereotactic head frames for use with CT (Computed Tomography) and MRI and in positioning systems for gamma beam and particle therapy equipment.
- Commission Delegated Directive 2014/4/EU of 18 October 2013 amending, for the purposes of adapting to technical progress, the Annex IV to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead enabling vacuum tight connections between aluminium and steel in X-ray image intensifiers.
- Commission Delegated Directive 2014/5/EU of 18 October 2013 amending, for the purposes of adapting to technical progress, Annex IV to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead in solders on printed circuit boards, termination coatings of electrical and electronic components and coatings of printed circuit boards, solders for connecting wires and cables, solders connecting transducers and sensors that are used durably at a temperature below -20°C under normal operating and storage conditions.
- Commission Delegated Directive 2014/6/EU of 18 October 2013 amending, for the purposes of adapting to technical progress, the Annex IV to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead in the surface coatings of pin connector systems requiring non-magnetic connectors which are used durably at a temperature below -20°C under normal operating and storage conditions.

- Commission Delegated Directive 2014/7/EU of 18 October 2013 amending, for the purposes of adapting to technical progress, Annex IV to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead in solders, termination coatings of electrical and electronic components and printed circuit boards, connections of electrical wires, shields and enclosed connectors which are used (a) in magnetic fields within the sphere of 1 m radius around the isocentre of the magnet in medical magnetic resonance imaging equipment, including patient monitors designed to be used within this sphere, or (b) in magnetic fields within 1 m distance from the external surfaces of cyclotron magnets, magnets for beam transport and beam direction control applied for particle therapy.
- Commission Delegated Directive 2014/8/EU of 18 October 2013 amending, for the purposes of adapting to technical progress, Annex IV to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead in solders for mounting cadmium telluride and cadmium zinc telluride digital array detectors to printed circuit boards.
- Commission Delegated Directive 2014/9/EU of 18 October 2013 amending, for the purposes of adapting to technical progress, the Annex IV to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead and cadmium in metallic bonds creating superconducting magnetic circuits in MRI, SQUID, NMR (Nuclear Magnetic Resonance) or FTMS (Fourier Transform Mass Spectrometer) detectors.
- Commission Delegated Directive 2014/10/EU of 18 October 2013 amending, for the purposes of adapting to technical progress, Annex IV to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead in alloys, as a superconductor or thermal conductor, used in cryo-cooler cold heads and/or in cryo-cooled cold probes and/or in cryo-cooled equipotential bonding systems, in medical devices (category 8) and/or in industrial monitoring and control instruments.
- Commission Delegated Directive 2014/11/EU of 18 October 2013 amending, for the purposes of adapting to technical progress, the Annex IV to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for hexavalent chromium in alkali dispensers used to create photocathodes in X-ray image intensifiers until 31 December 2019 and in spare parts for X-ray systems placed on the EU market before 1 January 2020.
- Commission Delegated Directive 2014/12/EU of 18 October 2013 amending, for the purposes of adapting to technical progress, the Annex IV to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead in solders on printed circuit boards of detectors and data acquisition units for Positron Emission Tomographs which are integrated into Magnetic Resonance Imaging equipment.
- Commission Delegated Directive 2014/13/EU of 18 October 2013 amending, for the purposes of adapting to technical progress, the Annex IV to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for

lead in solders on populated printed circuit boards used in Directive 93/42/EEC class IIa and IIb mobile medical devices other than portable emergency defibrillators.

- Commission Delegated Directive 2014/14/EU of 18 October 2013 amending, for the purposes of adapting to technical progress, the Annex III to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for 3,5 mg mercury per lamp in single capped compact fluorescent lamps for general lighting purposes < 30 W with a lifetime equal to or above 20,000 h.
- Commission Delegated Directive 2014/15/EU of 18 October 2013 amending, for the purposes of adapting to technical progress, the Annex IV to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead, cadmium and hexavalent chromium in reused spare parts, recovered from medical devices placed on the market before 22 July 2014 and used in category 8 equipment placed on the market before 22 July 2021, provided that reuse takes place in auditable closed-loop business-to-business return systems, and that the reuse of parts is notified to the consumer.
- Commission Delegated Directive 2014/16/EU of 18 October 2013 amending, for the purposes of adapting to technical progress, the Annex IV to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead as an activator in the fluorescent powder of discharge lamps when used for extracorporeal photopheresis lamps containing BSP ( $\text{BaSi}_2\text{O}_5\text{:Pb}$ ) phosphors.
- Commission Delegated Directive 2014/69/EU of 13 March 2014 amending, for the purposes of adapting to technical progress, Annex IV to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead in dielectric ceramic in capacitors for a rated voltage of less than 125 V AC or 250 V DC for industrial monitoring and control instruments.
- Commission Delegated Directive 2014/70/EU of 13 March 2014 amending, for the purposes of adapting to technical progress, Annex IV to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead in micro-channel plates (MCPs).
- Commission Delegated Directive 2014/71/EU of 13 March 2014 amending, for the purposes of adapting to technical progress, Annex IV to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead in solder in one interface of large area stacked die elements.
- Commission Delegated Directive 2014/72/EU of 13 March 2014 amending, for the purposes of adapting to technical progress, Annex III to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead in solders and termination finishes of electrical and electronic components and finishes of printed circuit boards used in ignition modules and other electrical and electronic engine control systems.
- Commission Delegated Directive 2014/73/EU of 13 March 2014 amending, for the purposes of adapting to technical progress, Annex IV to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead in

platinised platinum electrodes used for conductivity measurements.

- Commission Delegated Directive 2014/74/EU of 13 March 2014 amending, for the purposes of adapting to technical progress, Annex IV to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead used in other than C-press compliant pin connector systems for industrial monitoring and control instruments.
- Commission Delegated Directive 2014/75/EU of 13 March 2014 amending, for the purposes of adapting to technical progress, Annex IV to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for mercury in cold cathode fluorescent lamps (CCFLs) for back-lighting liquid crystal displays, not exceeding 5 mg per lamp, used in industrial monitoring and control instruments placed on the market before 22 July 2017.
- Commission Delegated Directive 2014/76/EU of 13 March 2014 amending, for the purposes of adapting to technical progress, Annex III to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for Mercury in hand crafted luminous discharge tubes (HLDTs) used for signs, decorative or architectural and specialist lighting and light-artwork.
- Commission Delegated Directive (EU) 2015/573 of 30 January 2015 amending, for the purposes of adapting to technical progress, Annex IV to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead in polyvinyl chloride sensors in in-vitro diagnostic medical devices.
- Commission Delegated Directive (EU) 2015/574 of 30 January 2015 amending, for the purposes of adapting to technical progress, Annex IV to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for mercury in intravascular ultrasound imaging systems.
- Commission Delegated Directive (EU) 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.
- Commission Delegated Directive (EU) 2016/585 of 12 Feb 2016 amending, for the purposes of adapting to technical progress, Annex IV to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead, cadmium, hexavalent chromium, and polybrominated diphenyl ethers (PBDE) in spare parts recovered from and used for the repair or refurbishment of medical devices or electron microscopes.
- Commission Delegated Directive (EU) 2016/1028 of 19 April 2016 amending, for the purposes of adapting to technical progress, Annex IV to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead in solders of electrical connections to temperature measurement sensors in certain devices.
- Commission Delegated Directive (EU) 2016/1029 of 19 April 2016 amending, for the purposes of adapting to technical progress, Annex IV to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for

- cadmium anodes in Hersch cells for certain oxygen sensors used in industrial monitoring and control instruments.
- Commission Delegated Directive (EU) 2017/1009 of 13 March 2017 amending, for the purposes of adapting to technical progress, Annex III to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for cadmium and lead in filter glasses and glasses used for reflectance standards.
  - Commission Delegated Directive (EU) 2017/1010 of 13 March 2017 amending, for the purposes of adapting to technical progress, Annex III to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead in bearing shells and bushes for certain refrigerant-containing compressors.
  - Commission Delegated Directive (EU) 2017/1011 of 15 March 2017 amending, for the purposes of adapting to technical progress, Annex III to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead in white glasses used for optical applications.
  - Commission Delegated Directive (EU) 2017/1975 of 7 August 2017 amending, for the purposes of adapting to scientific and technical progress, Annex III to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for cadmium in colour converting light-emitting diodes (LEDs) for use in display systems.
  - Directive (EU) 2017/2102 of the European Parliament and of the Council of 15 November 2017 amending Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment\*.
  - Commission Delegated Directive (EU) 2018/736 of 27 February 2018 amending, for the purposes of adapting to scientific and technical progress, Annex III to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for certain electrical and electronic components containing lead in glass or ceramic\*\*.
  - Commission Delegated Directive (EU) 2018/737 of 27 February 2018 amending, for the purposes of adapting to scientific and technical progress, Annex III to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead in solders for the soldering to machined through hole discoidal and planar array ceramic multilayer capacitors\*\*.
  - Commission Delegated Directive (EU) 2018/738 of 27 February 2018 amending, for the purposes of adapting to scientific and technical progress, Annex III to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead in cermet-based trimmer potentiometer elements\*\*.
  - Commission Delegated Directive (EU) 2018/739 of 1 March 2018 amending, for the purposes of adapting to scientific and technical progress, Annex III to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead as an alloying element in steel\*\*.
  - Commission Delegated Directive (EU) 2018/740 of 1 March 2018 amending, for

- the purposes of adapting to scientific and technical progress, Annex III to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead as an alloying element in aluminium<sup>\*\*</sup>.
- Commission Delegated Directive (EU) 2018/741 of 1 March 2018 amending, for the purposes of adapting to scientific and technical progress, Annex III to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead as an alloying element in copper<sup>\*\*</sup>.
  - Commission Delegated Directive (EU) 2018/742 of 1 March 2018 amending, for the purposes of adapting to scientific and technical progress, Annex III to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead in high melting temperature solders<sup>\*\*</sup>.
  - Commission Delegated Directive (EU) 2019/169 of 16 November 2018 amending, for the purposes of adapting to scientific and technical progress, Annex III to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead in dielectric ceramic in certain capacitors<sup>\*\*\*</sup>.
  - Commission Delegated Directive (EU) 2019/170 of 16 November 2018 amending, for the purposes of adapting to scientific and technical progress, Annex III to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead in PZT based dielectric ceramic materials for certain capacitors<sup>\*\*\*</sup>.
  - Commission Delegated Directive (EU) 2019/171 of 16 November 2018 amending, for the purposes of adapting to scientific and technical progress, Annex III to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for cadmium and its compounds in electrical contacts<sup>\*\*\*</sup>.
  - Commission Delegated Directive (EU) 2019/172 of 16 November 2018 amending, for the purposes of adapting to scientific and technical progress, Annex III to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit flip chip packages<sup>\*\*\*</sup>.
  - Commission Delegated Directive (EU) 2019/173 of 16 November 2018 amending, for the purposes of adapting to scientific and technical progress, Annex III to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead and cadmium in printing inks for the application of enamels on glasses<sup>\*\*\*</sup>.
  - Commission Delegated Directive (EU) 2019/174 of 16 November 2018 amending, for the purposes of adapting to scientific and technical progress, Annex III to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead bound in crystal glass as defined in Directive 69/493/EEC<sup>\*\*\*</sup>.
  - Commission Delegated Directive (EU) 2019/175 of 16 November 2018 amending, for the purposes of adapting to scientific and technical progress, Annex III to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead oxide in seal frit used for making window assemblies for

- certain laser tubes<sup>\*\*\*</sup>.
- Commission Delegated Directive (EU) 2019/176 of 16 November 2018 amending, for the purposes of adapting to scientific and technical progress, Annex III to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead in the plating layer of certain diodes<sup>\*\*\*</sup>.
  - Commission Delegated Directive (EU) 2019/177 of 16 November 2018 amending, for the purposes of adapting to scientific and technical progress, Annex III to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead as activator in the fluorescent powder of discharge lamps containing phosphors<sup>\*\*\*</sup>.
  - Commission Delegated Directive (EU) 2019/178 of 16 November 2018 amending, for the purposes of adapting to scientific and technical progress, Annex III to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead in bearings and bushes applied in certain non-road professional use equipment<sup>\*\*\*\*</sup>.
  - Commission Delegated Directive (EU) 2019/1845 of 8 August 2019 amending, for the purposes of adapting to scientific and technical progress, Annex III to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for bis(2-ethylhexyl) phthalate (DEHP) in certain rubber components used in engine systems.
  - Commission Delegated Directive (EU) 2019/1846 of 8 August 2019 amending, for the purposes of adapting to scientific and technical progress, Annex III to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead in solders used in certain combustion engines.
  - Commission Delegated Directive (EU) 2020/360 of 17 December 2019 amending, for the purposes of adapting to scientific and technical progress, Annex IV to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead in platinized platinum electrodes used for certain conductivity measurements<sup>\*\*\*\*\*</sup>.
  - Commission Delegated Directive (EU) 2020/361 of 17 December 2019 amending, for the purposes of adapting to scientific and technical progress, Annex III to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for hexavalent chromium as an anti-corrosion agent of the carbon steel cooling system in absorption refrigerators<sup>\*\*\*\*\*</sup>.
  - Commission Delegated Directive (EU) 2020/364 of 17 December 2019 amending, for the purposes of adapting to scientific and technical progress, Annex IV to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for the use of cadmium in certain radiation tolerant video camera tubes<sup>\*\*\*\*\*</sup>.
  - Commission Delegated Directive (EU) 2020/365 of 17 December 2019 amending, for the purposes of adapting to scientific and technical progress, Annex III to Directive 2011/65/EU of the European Parliament and of the Council as regards an

exemption for lead in solders and termination finishes used in certain hand-held combustion engines\*\*\*\*\*.

- Commission Delegated Directive (EU) 2020/366 of 17 December 2019 amending, for the purposes of adapting to scientific and technical progress, Annex IV to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for lead as a thermal stabiliser in polyvinyl chloride used in certain in-vitro diagnostic medical devices for the analysis of blood and other body fluids and body gases\*\*\*\*\*.
- Commission Delegated Directive (EU) 2021/647 of 15 January 2021 amending, for the purposes of adapting to scientific and technical progress, Annex III to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for the use of certain lead and hexavalent chromium compounds in electric and electronic initiators of explosives for civil (professional) use\*\*\*\*\*.
- Commission Delegated Directive (EU) 2021/884 of 8 March 2021 amending, for the purposes of adapting to scientific and technical progress, Annex IV to Directive 2011/65/EU of the European Parliament and of the Council as regards the validity period of an exemption for the use of mercury in electric rotating connectors used in intravascular ultrasound imaging systems\*\*\*\*\*.

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- \* Applicable as from 12th June, 2019.
  - \*\* Applicable as from 1st July, 2019.
  - \*\*\* Applicable as from 1st March, 2020.
  - \*\*\*\* Applicable as from 22nd July, 2019.
  - \*\*\*\*\* Applicable as from 1st September, 2020.
  - \*\*\*\*\* Applicable as from 1st April, 2021.
  - \*\*\*\*\* Applicable as from 1<sup>st</sup> November, 2021.
  - \*\*\*\*\* Applicable as from 1<sup>st</sup> July, 2022.