

CIVD Directive Material Compliance

Directive to ensure material compliance requirements
for vehicles of the Caravanning Industry

Version: 1.4
vom 27.01.2020



Contents

1	Introduction.....	4
2	Terms and abbreviations.....	5
3	CIVD list of regulated substances.....	7
3.1	Substance regulations and prohibitions – Relevant for all products	7
3.1.1	Regulation (EC) No. 1907/2006 REACH Annex XIV List of substances that must be authorised.....	7
3.1.2	Regulation (EC) No. 1907/2006 REACH – Annex XVII – List of restricted substances .	7
3.1.3	Chemicals Prohibition Ordinance – ChemVerbotsV	8
3.1.4	Regulation (EC) No. 2019/1021 regarding persistent organic pollutants (POP)	8
3.1.5	Packaging Directive	9
3.2	Substance regulations and prohibitions – Relevant for products in different application areas	10
3.2.1	End of Life Vehicles Directive (ELV).....	10
3.2.2	RoHS directive	10
3.2.3	Battery Directive	11
3.2.4	Drinking Water Regulation (TrinkwV 2001)	12
3.2.5	EU Timber Regulation	12
3.2.6	Biocidal Products Regulation (EU) No. 528/2012	13
3.2.7	Regulation (EC) No 1935/2004 - Food contact materials and articles.....	13
3.3	Ancillary production and operating materials	14
3.3.1	Safety data sheets.....	14
3.4	Substances that must be declared	15
3.4.1	SVHC Candidates List.....	15
3.5	Other requirements	16
3.5.1	Indoor emissions (VOC)	16
3.5.2	Toy Safety Directive - 2009/48/EC	16
4	List of figures.....	23
5	Change Index.....	23



1 Introduction

The CIVD Directive – Material Compliance aims to ensure a safe handling of materials and products which can be used or installed in a motor caravan or caravan in the European Union.

This directive describes the CIVD's requirements with regard to all known substances that are prohibited, regulated and must be declared in the current form.

The material compliance requirements are equivalent to the other product requirements.

The Material Compliance Directive is a compilation of legal requirements. Should any legal changes not yet be reflected in this directive, this does not release the supplier from the obligation to take these legal changes into account and to comply with the current, respectively valid legal requirements. The supplier is obliged to procure the current directives, laws and standards himself.

Products and raw materials of unknown origin and/or composition, or raw materials with inadequate material data, may not be used.

In individual cases, customers must also be provided with the technical data sheets for all raw materials and ancillary materials for initial sampling on request (with the exception of end users). The customer reserves the right to conduct inspections and laboratory testing of the materials in an individual case.

The supplier is obliged to check compliance with the legal requirements and to provide the necessary material information free of charge.

The CIVD makes the directive available on its website.

The supplier is obliged to check regularly whether the guideline is available in updated form. An amended version of the directive replaces the predecessor version and is valid with immediate effect. The CIVD informs its members of the new versions or changes to the directive. The CIVD does not notify the supplier with regard to changes to the directive.

The present CIVD directive was prepared by tec4U - Solutions GmbH, Saar-Lor-Lux-Straße 13, D-66115 Saarbrücken. The directive may only be used and/or copied by the Caravanning Industrie Verband e.V. (CIVD), its members and the participants in the supplier chain. The approval of tec4U - Solutions GmbH must be obtained if the directive is to be used – entirely or in part – outside of the CIVD, its members and the supplier chain.



2 Terms and abbreviations

Substance:

Chemical element and its compounds in a natural form or generated with a production method, including the ingredients necessary to maintain its stability, and the contaminations resulting from the applied method, but with the exception of solvents that can be separated from the material without impairing its stability and without changing its composition (see REACH Art. 3 (1)).

Examples of chemical compounds Organic: water, formaldehyde, ethanol Metallic: iron, copper, zinc

Mineral: iron sulphide, sodium chloride, silica

Preparation:

Mix, mixture or solutions consisting of two or more substances (mixture and preparation are synonymous).

Examples of preparations:

Mix: sand Mixture: air

Solution: octane in petrol

Homogeneous material:

A material of consistently homogeneous composition or a material that consists of different materials, which cannot be disassembled or separated into individual materials through mechanical intervention such as unscrewing, cutting, crushing, grinding and sanding (see RoHS Art. 3 (20)). Examples of homogeneous materials include individual types of plastics, ceramics, glass, metals, alloys, artificial resin and coatings.

Intentionally added:

Generally known as the intentional use of a substance that is contained in a product in order to produce a certain feature, appearance or specific quality.

Battery or accumulator:

A source of electric energy that consists of one or more (non-rechargeable) primary cells or one or more (rechargeable) secondary cells, which is generated by the direct conversion of chemical energy.

Packaging:

Products made from any type of substances for the protection, handling, delivery and presentation of goods, which may range from the raw material to the processed product, and that are forwarded from the manufacturer to the user or consumer. "Disposable items" used for the same purpose must also be viewed as packaging (see EU Packaging Directive Art. 3 (1))

Packaging components:

Parts of packaging that can be separated by hand or simple mechanical processes. Additional elements that are directly attached to a product and that fulfil a packaging function are deemed packaging, unless they form an integral part of the product.



Prohibited substances:

Prohibited substances may not be contained in products, components, materials, preparations as well as ancillary and operating materials at a level that exceeds the limits noted in this document. These substances may only be contained as naturally occurring contaminations, and may not be added intentionally. Contaminations involving these substances must be indicated on a qualitative level.

Substances that must be declared:

Substances that must be declared should not be added to some applications, and must be declared if they exceed the indicated limits. The substances must be indicated for each product, component, material, substance preparation, ancillary or operating material. The document specifies maximum limits for the various substances. They must not be declared if levels fall below these limits.

Application:

Means that the limit for the substance refers to the material or part in which the substance is contained for the purpose of attaining a desired functionality.

Product:

Item that upon manufacture attains a specific shape, surface or design that determines its function to a greater degree than its chemical composition.

Latest application date

This is the date by which an application for approval must be submitted pursuant to the REACH regulation (date is at least 18 months before the sunset date), so that the substance may continue to be used. (Deadline)

Information about the application for approval and the formal process for an approval request can be found at:

<https://echa.europa.eu/applications-for-authorisation-consultation>

Sunset date:

This is the date after which a substance listed in Annex XIV of the REACH regulation can no longer be brought into circulation, unless approval was issued.

CAS number:

The CAS number (also CAS Registry Number, CAS = Chemical Abstracts Service) is the international unique numeric identifier for chemical substances. A unique CAS number exists for each chemical substance registered in the CAS database (also bio-sequences, alloys, polymers).



3 CIVD list of regulated substances

3.1 Substance regulations and prohibitions – Relevant for all products

The material requirements described under item 3.1 apply to all products

1. that are installed in motor caravans or caravans at the manufacturer's responsibility
2. that are destined to be installed in motor caravans or caravans.

3.1.1 Regulation (EC) No. 1907/2006 REACH Annex XIV List of substances that must be authorised

The addition of a substance from the list of substances of very high concern listed in Annex XIV of the REACH regulation eventually leads to the requirement to obtain approval for the substance. After a transition period, the substance may only be used with approval, or its use is prohibited.

The explanations regarding the terms "latest application date" and "sunset date" can be found in item 2 Terms and abbreviations.

You can find the current Annex XVII of the REACH regulation under the following link

<https://echa.europa.eu/de/authorisation-list>

3.1.2 Regulation (EC) No. 1907/2006 REACH – Annex XVII – List of restricted substances

Annex XVII of the REACH regulation regulates or prohibits precisely defined substances in individual applications.

You can find the current Annex XVII of the REACH regulation under the following link:

<https://echa.europa.eu/de/substances-restricted-under-reach>



3.1.3 Chemicals Prohibition Ordinance – ChemVerbotsV

The ordinance regarding prohibitions and restrictions on the circulation of dangerous substances, preparations and products according to the Chemicals Act is a German law that stipulates special national requirements in addition to the REACH regulation. Since REACH applies directly in EU member states as a regulation, an amendment of ChemVerbotsV will be approved in 2016 that combines the requirements from the REACH and CLP regulation with those of the German chemicals law. The national requirements for the following substances and substance groups are also defined:

Table 1: ChemVerbotsV Substance and substance groups

Substances/mixtures
Formaldehyde
Dioxins and furans
Pentachlorophenol
Bio-persistent fibres

The special requirements and listed exceptions can be obtained from the legislative text. The requirements under the new Chemicals Prohibition Ordinance go into effect on 1 January 2019.

http://www.gesetze-im-internet.de/chemverbotsv_2017/index.html

3.1.4 Regulation (EC) No. 2019/1021 regarding persistent organic pollutants (POP)

This EU Regulation implements the Stockholm Convention on Persistent Organic Pollutants, amongst others. The Stockholm Convention, also POP Convention, represents an agreement regarding prohibition and restriction measures that are binding under international law for certain persistent organic pollutants. For example, the convention prohibits or restricts the manufacture, use and trade of 22 dangerous chemicals.

Additional information about the Stockholm Convention can be found on the official website under the following link:

<http://chm.pops.int/>



3.1.5 Packaging Directive

DIRECTIVE 94/62/EC OF THE EUROPEAN PARLIAMENT AND COUNCIL from 20 December 1994 regarding packaging and packaging waste restricts the concentration of heavy metals in packaging materials.

Table 2: Substance restriction – Packaging

Pure substances and substance groups	Maximum concentration in packaging or packaging components in weight – ppm
Lead, cadmium, mercury and chromium VI	100*

*cumulative

Note:

The EU Packaging Directive was transposed into national law in Germany by the VerpackG. The purpose of the Packaging Act is to ensure that those who put packaging into circulation for the first time which is generated as waste by private final consumers contribute fully to the costs of collection, sorting and recycling.

The full text of the law can be found at the following link:

<https://www.gesetze-im-internet.de/verpackg/>



3.2 Substance regulations and prohibitions – relevant for products in different application areas

In contrast to the substance regulations in section 3.1, in this case the supplier must check whether his products fall under the application area of the respective requirement. This depends on the location where the delivered product will be installed and used in the motor caravan or caravan. If the supplier is not able to clarify this situation on his own, he is required to consult with his customer.

3.2.1 End of Life Vehicles Directive (ELV)

DIRECTIVE 2000/53/EC OF THE EUROPEAN PARLIAMENT AND COUNCIL from 18 September 2000 regarding end of life vehicles.

Must be applied to all components of the base vehicle without the subsequent structure of a motor caravan.

The exceptions catalogue for the prohibited substances can be found in Annex 1

The ELV substance regulation refers to the maximum concentrations in the homogeneous material of each item.

Table 3: Substance regulations pursuant to ELV Directive

Substance groups	Maximum concentrations in the homogeneous substance, in per cent
Cadmium and cadmium compounds	0.01%
Hexavalent chromium (Cr6+) and Cr6+ compounds	0.10%
Lead and lead compounds	
Mercury and mercury compounds	

3.2.2 RoHS directive

Directive 2011/65/EU of the European Parliament and Council from 8 June 2011 regarding the restriction of the use of certain harmful substances in electric and electronic devices (RoHS Directive) went into effect on 2 January 2013.

Excepted from these restrictions are electric and electronic devices that are especially designed as a part of a motor caravan (caravan), that are supposed to be installed as such and that can only fulfil their function as a part of a motor caravan (caravan).

The exceptions catalogue for prohibited substances can be found in Annex 2



The RoHS substance regulation refers to the maximum concentrations in the homogeneous material of each product.

Table 4: Substance regulations pursuant to RoHS Directive

Substance groups	Maximum concentrations in the homogeneous substance, in per cent
Cadmium and cadmium compounds	0.01%
Hexavalent chromium (Cr6+) and Cr6+ compounds	0.10%
Lead and lead compounds	
Mercury and mercury compounds	
Polybrominated diphenyl ethers (PBDE)	
Polybrominated biphenyls (PBB)	
Bis(2-ethylhexyl)phthalate (DEHP)	
Benzyl butyl phthalate (BBP)	
Dibutyl phthalate (DBP)	
Diisobutyl phthalate (DIBP)	

3.2.3 Battery Directive

Directive 2006/66/EC of the European Parliament and Council from 6 September 2006 regarding batteries and accumulators as well as end of life batteries and accumulators, and the repeal of Directive 91/157/EEC, restricts the use of mercury and cadmium in batteries in accumulators.

Table 5: Substance regulations of the Battery Directive

Pure substances	Maximum concentration in the item, in per cent	Application restrictions
Mercury and mercury compounds	0.0005%	Batteries and accumulators
Cadmium and cadmium compounds	0.002%	Device batteries and accumulators



3.2.4 Drinking Water Regulation (TrinkwV 2001)

The regulation regarding the quality of water for human consumption (Drinking Water Regulation – TrinkwV 2001) must be observed. The following standards and regulations must be applied with regard to motor caravans and caravans:

- DIN 2001-2:2009-04: Supply of drinking water from small facilities and mobile facilities – Part 2: Mobile facilities – Guidelines for the requirements for drinking water, planning, construction, operation and maintenance of the facilities,
- Technical Rule DVGW Work Sheet W 270 (Deutsche Vereinigung des Gas- und Wasserfaches e.V.).
- Guidelines and recommendations by the federal environmental office for materials that come into contact with drinking water, e.g. KTW Guideline.
- Assessment documents of the federal environmental office for materials that come into contact with drinking water, e.g. assessment basis for metallic materials.

All materials and components that come into contact with drinking water must meet the requirements of the Drinking Water Regulation.

Example: water installation, kitchen

Additional information about the regulation can be found on the official website under the following official link:

http://www.gesetze-im-internet.de/trinkwv_2001/index.html

3.2.5 EU Timber Regulation

Art. 4 (1) of the EU Regulation prohibits the import of illegal timber and illegal timber products. Special due diligence requirements are imposed on parties that import timber into the EU domestic market for the first time. In Germany, the EU Regulation is specified with the “Law against the trade of illegally logged timber”.

All materials and components that are made of timber or timber components must comply with the requirements of the EU Timber Regulation.

Examples: wall cladding, installations



3.2.6 Biocidal Products Regulation (EU) No. 528/2012

The regulation regarding biocidal products (BPR, EU Regulation No. 528/2012) for the provision and use of biocidal products in the European market went into effect on 1 September 2013. This regulation standardises the approval of biocides in the European Union with a multi-stage process.

Every supplier to a CIVD member is required to fully comply with all of the specifications and obligations for

- biocidal products
- treated goods

if his product falls under the scope of the regulation.

All materials and components that were treated with substances with biocidal effects must comply with the requirements of the EU Biocidal Regulation.

Example: toilet tanks, air lines for air-conditioning

3.2.7 Regulation (EC) No 1935/2004 - Food contact materials and articles

The Regulation "1935/2004/EC of 27 October 2004 on materials and articles intended to come into contact with food" is a "framework" regulation which is valid for all food contact materials.

Its scope includes:

Materials and articles which:

- a) are intended to come into contact with food,
- b) are already in contact with food
- c) can reasonably be expected to come into contact with or transfer their components to food under normal or foreseeable conditions of use.

Examples: shelves, drawers, drawers etc. in refrigerators, cutting boards, crockery, cutlery etc.

The general requirements of the regulation are as follows:

Materials and objects, including active and intelligent materials and objects, shall be manufactured in accordance with good manufacturing practice in such a way that, under normal or foreseeable conditions of use, they do not transfer components to food in quantities that are appropriate:

- a) to harm human health
- b) to cause an unacceptable change in the composition of the food
- c) to cause deterioration in the organoleptic characteristics of the food.

The regulatory instruments referred to in Article 5 of the Regulation include inter alia:

- List of substances authorised during manufacture (positive lists)
- Purity criteria for authorised substances
- specific conditions of use for the authorised substance
- labelling regulations

All materials and components that come into contact with the food have to comply with the requirements of Regulation 1935/2004/EC. For materials and components in contact with drinking water see 3.2.4.



3.3 Ancillary production and operating materials

3.3.1 Safety data sheets

The safety data sheet is the central element of communication within the supply chain for dangerous substances and mixtures. It provides important information for the following characteristics:

- identity of the product
- hazards
- safe handling
- preventative measures
- measures taken case of a hazard.

The requirements for the contents and format of the safety data sheet are set out in Art. 31 and Annex II of the REACH Regulation (EC) No. 1907/2006.

The supplier of a substance/mixture is responsible for ensuring that the safety data sheet has been filled out correctly and in full.

The safety data sheet is provided to the CIVD member in paper form, in electronic form or as a download option free of charge no later than on the date of the first shipment.

Suppliers promptly update the safety data sheet (Art. 31 (9)) if

- new information becomes available that may have an effect on risk management measures
- an approval was issued or rejected
- a restriction was issued

The corrected version must be provided to the customer if deliveries were made to the customer during the last 12 months.



3.4 Substances that must be declared

3.4.1 SVHC Candidates List

The current version of the official SVHC Candidates List pursuant to REACH (Regulation 1907/2006/EC) can be found at:

http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp

According to Art. 33 of the REACH regulation, each supplier is required to do the following:

Every supplier of a product that contains a substance (that meets the criteria of Art. 57 and that is defined pursuant to Art. 59 (1)) at a concentration of more than 0.1 per cent by weight (w/w) will provide the buyer of the product with the information that is available to him and that is sufficient for the safe use of the product, but will at the minimum indicate the name of the relevant substance.

Ingredients of very high concern (SVHC Candidates List) in

- components
- spare parts
- accessories
- packaging

If the delivered products contain substances of very high concern at a proportion that exceeds 0.1 per cent by weight, which are published in the Candidates List pursuant to Art. 59 (1) of the Regulation 1907/2006/EC, the contractor is required to provide all information pursuant to Art. 33 (1) of the Regulation 1907/2006/EC with the delivery on his own accord. This also applies if such substances are only added to the Candidates List during an on-going delivery relationship.

This information must be provided to private consumers on request within 45 days free of charge.

According to the decision by the European Court of Justice, the concept “once a product, always a product” applies. The presence of this SVHC candidate substance must be communicated as soon as a product exceeds the concentration limit of 0.1%.



3.5 Other requirements

3.5.1 Indoor emissions (VOC)

Suppliers are expected to apply a special level of diligence with respect to

- materials
- components
- accessories

destined for indoor areas with regard to possible emissions of volatile organic compounds (VOC). Volatile organic compounds made of hydrocarbons can occur in natural products such as timber, but also in plastics as a result of raw materials and processing activities.

The next customer in the supplier chain must be informed if the product contains such volatile organic compounds that may contribute to indoor emissions in the vehicles.

3.5.2 Toy Safety Directive - 2009/48/EC

Directive 2009/48/EC applies to products which are intended or designed - exclusively or not exclusively - to be used for play by children under 14 years of age. The phrase "not exclusively" in this Directive also applies to products which are not to be understood as toys but which children may consider to be such. The Directive prohibits the use of so-called KEN substances (KEN = carcinogenic - mutagenic - toxic to reproduction) for all accessible parts of toys. Also allergenic fragrances with high allergenic potential are completely prohibited or must be indicated on the toy with low potential.



Appendix 1: Exemptions ELV-Directive

No.	Materials and components	Scope and expiry date of the exemption
	Lead as an alloying element	
1a	Steel for machining purposes and batch hot dip galvanised steel components containing up to 0,35 % lead by weight	
1b	Continuously galvanised steel sheet containing up to 0,35 % lead by weight	Vehicles type-approved before 1 January 2016 and spare parts for these vehicles
2a	Aluminium for machining purposes with a lead content up to 2 % by weight	As spare parts for vehicles put on the market before 1 July 2005
2b	Aluminium with a lead content up to 1,5 % by weight	As spare parts for vehicles put on the market before 1 July 2008
2c I	Aluminium with a lead content up to 0,4 % by weight	
2c II	Aluminium alloys not covered by entry 2(c)(i) with a lead content of up to 0,4 % by weight (Applies to aluminium alloys where lead has not been intentionally added but is present due to the use of recycled aluminium).	
3	Copper alloy containing up to 4 % lead by weight	
4a	Bearing shells and bushes	As spare parts for vehicles put on the market before 1 July 2008
4b	Bearing shells and bushes in engines, transmissions and air conditioning compressors	As spare parts for vehicles put on the market before 1 July 2011
	Lead and lead compounds in components	
5a	Lead in batteries and high voltage systems (*) used only for propulsion in M1 and N1 category vehicles	Vehicles type-approved before 1 January 2019 and spare parts for these vehicles
	Lead in batteries for batteries not covered by 5a	
6	Vibration dampers	Vehicles type-approved before 1 January 2016 and spare parts for these vehicles
7a	Vulcanising agents and stabilisers for elastomers in brake hoses, fuel hoses, air ventilation hoses, elastomer/metal parts in the chassis applications, and engine mountings	As spare parts for vehicles put on the market before 1 July 2005
7b	Vulcanising agents and stabilisers for elastomers in brake hoses, fuel hoses, air ventilation hoses, elastomer/metal parts in the chassis applications, and engine mountings containing up to 0,5 % lead by weight	As spare parts for vehicles put on the market before 1 July 2006
7c	Bonding agents for elastomers in powertrain applications containing up to 0,5 % lead by weight	As spare parts for vehicles put on the market before 1 July 2009
8a	Lead in solders to attach electrical and electronic components to electronic circuit boards and lead in finishes on terminations of components other than electrolyte aluminium capacitors, on component pins and on electronic circuit boards	Vehicles type-approved before 1 January 2016 and spare parts for these vehicles
8b	Lead in solders in electrical applications other than soldering on electronic circuit boards or on glass	Vehicles type-approved before 1 January 2011 and spare parts for these vehicles
8c	Lead in finishes on terminals of electrolyte aluminium capacitors	Vehicles type-approved before 1 January 2013 and spare parts for these vehicles

	Materials and components	Scope and expiry date of the exemption
Lead and lead compounds in components		
8(d)	Lead used in soldering on glass in mass airflow sensors	Vehicles type-approved before 1 January 2015 and spare parts of such vehicles
8e	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)	
8(f)(a)	Lead in compliant pin connector systems	Vehicles type-approved before 1 January 2017 and spare parts for these vehicles
8(f)(b)	Lead in compliant pin connector systems other than the mating area of vehicle harness connectors	
8(g)	Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit flip chip packages	
8(h)	Lead in solder to attach heat spreaders to the heat sink in power semiconductor assemblies with a chip size of at least 1 cm ² of projection area and a nominal current density of at least 1 A/mm ² of silicon chip area	Vehicles type-approved before 1 January 2016 and spare parts for these vehicles
8(i)	Lead in solders in electrical glazing applications on glass except for soldering in laminated glazing	Vehicles type-approved before 1 January 2016 and spare parts for these vehicles
8(j)	Lead in solders for soldering of laminated glazing	Vehicles type-approved before 1 January 2020 and spare parts for these vehicles
9	Valve seats	As spare parts for engine types developed before 1 July 2003
10(a)	Electrical and electronic components which contain lead in a glass or ceramic, in a glass or ceramic matrix compound, in a glass-ceramic material, or in a glass-ceramic matrix compound. This exemption does not cover the use of lead in: — glass in bulbs and glaze of spark plugs, — dielectric ceramic materials of components listed under 10(b), 10(c) and 10(d).	
10(b)	Lead in PZT-based dielectric ceramic materials of capacitors being part of integrated circuits or discrete semiconductors	
10(c)	Lead in dielectric ceramic materials of capacitors with a rated voltage of less than 125 V AC or 250 V DC	Vehicles type-approved before 1 January 2016 and spare parts for these vehicles
10(d)	Lead in the dielectric ceramic materials of capacitors compensating the temperature-related deviations of sensors in ultrasonic sonar systems	Vehicles type-approved before 1 January 2017 and spare parts for these vehicles
11	Pyrotechnic initiators	Vehicles type-approved before 1 July 2006 and spare parts for these vehicles
12	Lead-containing thermoelectric materials in automotive electrical applications to reduce CO ₂ emissions by recuperation of exhaust heat	Vehicles type-approved before 1 January 2019 and spare parts for these vehicles
Hexavalent chromium		
13(a)	Corrosion preventive coatings	As spare parts for vehicles put on the market before 1 July 2007
13(b)	Corrosion preventive coatings related to bolt and nut assemblies for chassis applications	As spare parts for vehicles put on the market before 1 July 2008
14	As an anti-corrosion agent of the carbon steel cooling system in absorption refrigerators in motor caravans up to 0,75 weight-% in the cooling solution except where the use of other cooling technologies is practicable (i.e. available on the market for the application in motor caravans) and does not lead to negative environmental, health and/or consumer safety impacts	
Mercury		
15(a)	Discharge lamps for headlight application	Vehicles type-approved before 1 July 2012 and spare parts for these vehicles
15(b)	Fluorescent tubes used in instrument panel displays	Vehicles type-approved before 1 July 2012 and spare parts for these vehicles
Cadmium		
16	Batteries for electrical vehicles	As spare parts for vehicles put on the market before 31 December 2008

Appendix 2: Exemptions RoHS-Directive

Applications exempted from the restriction in Article 4(1)		
No.	Exemption	Scope and dates of applicability
Lead in glas		
5(a)	Lead in glass of cathode ray tubes	
5(b)	Lead in glass of fluorescent tubes not exceeding 0,2 % by weight	
7(c)-I	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound	
13(a)	Lead in white glasses used for optical applications	
26	Lead oxide in the glass envelope of black light blue lamps	
29	Lead bound in crystal glass as defined in Annex I (Categories 1, 2, 3 and 4) of Council Directive 69/ 493/EEC (1)	
32	Lead oxide in seal frit used for making window assemblies for Argon and Krypton laser tubes	
Lead in solder		
7(a)	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)	
7(b)	Lead in solders for servers, storage and storage array systems, network infrastructure equipment for switching, signalling, transmission, and network management for telecommunications	
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 EEE 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	
24	Lead in solders for the soldering to machined through hole discoidal and planar array ceramic multilayer capacitors	
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
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
31	Lead in soldering materials in mercury free flat fluorescent lamps (which, e.g. are used for liquid crystal displays, design or industrial lighting)	
33	Lead in solders for the soldering of thin copper wires of 100 µm diameter and less in power transformers	
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 (2))	Expires on 31 December 2018



Applications exempted from the restriction in Article 4(1)		
No.	Materials and components	Scope and dates of applicability
	Lead as an alloying element	
6a	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, with the exception of in vitro medical diagnostic medical devices and industrial monitoring and control instruments; - 21 July 2023 for category 8 medical in-vitro diagnostic medical devices; - 21 July 2024 for category 9 industrial monitoring and control instruments and for category 11.
6a.I	Lead as an alloying element in steel for machining purposes with a maximum lead content of 0.35% by weight and in hot-dip galvanised steel components with a maximum lead content of 0.2% by weight	Expires on 21 July 2021 for categories 1 to 7 and 10.*
6b	Lead as an alloying element in aluminium containing up to 0,4 % lead by weight	
6b.I	Lead as an alloying element in aluminium containing up to 0,4 % lead by weight, as long as it is made from recycled leaded aluminium scrap.	Expires on 18 May 2021 for categories 1 to 7 and 10.*
6b.II	Lead as an alloying element in aluminium for cutting purposes containing up to 0,4 % lead by weight	Expires on 18 May 2021 for categories 1 to 7 and 10.*
6c	Copper alloy containing up to 4 % lead by weight	Expires on - 21 July 2021 for categories 8 and 9, with the exception of in vitro medical diagnostic medical devices and industrial monitoring and control instruments; - 21 July 2023 for category 8 medical in-vitro diagnostic medical devices; - 21 July 2024 for category 9 industrial monitoring and control instruments and for category 11.
	others	
7c-II	Lead in dielectric ceramic in capacitors for a rated voltage of 125 V AC or 250 V DC or higher	
7c 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 EEE placed on the market before 1 January 2013
7c IV	Lead in PZT based dielectric ceramic materials for capacitors which are part of integrated circuits or discrete semi-conductors	Expires on 21 July 2016
9b	Lead in bearing shells and bushes for refrigerant-containing compressors for heating, ventilation, air conditioning and refrigeration (HVACR) applications	Categories 8, 9 and 11; expires on - 21 July 2023 for categories 8 in vitro medical diagnostic medical devices; - 21 July 2024 for category 9 industrial monitoring and control instruments and category 11; - 21 July 2021 for other subcategories of categories 8 and 9.
9b I	Hermetic scroll compressors, having a rated power consumption not exceeding 9 kW, containing lead in bearing shells and bushes for refrigerants for heating, ventilation, air conditioning and refrigeration (HVACR) applications.	Applies to category 1; expires on 21 July 2019.
11a	Lead used in C-press compliant pin connector systems	Expired at 24 September 2010
11b	Lead used in other than C-press compliant pin connector systems	Expired at 1st January 2013
12	Lead as a coating material for the thermal conduction module C-ring	Expired at 24 September 2010
13b.I	lead in ion-coloured optical filter glass	Applies to categories 1 to 7 and 10; expires on 21 July 2021 for categories 1 to 7 and 10
	Others	
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	
18a	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
18b	Lead as activator in the fluorescent powder (1 % lead by weight or less) discharge lamps when used as sun tanning lamps containing phosphors such as BSP (BaSi 2 O 5 :Pb)	
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
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 EEE placed on the market before 24 September 2010
25	Lead oxide in surface conduction electron emitter displays (SED) used in structural elements, notably in the seal frit and frit ring	
34	Lead in cermet-based trimmer potentiometer elements	Valid for all categories; expires on: - 21 July 2021 for categories 1 to 7 and 10; - 21 July 2021 for category 8 medical in-vitro diagnostic medical devices and industrial monitoring and control instruments; - 21 July 2023 for category 8 medical in-vitro diagnostic medical devices; - 21 July 2024 for category 9 industrial monitoring and control instruments and for category 11.
37	Lead in the plating layer of high voltage diodes on the basis of a zinc borate glass body	



Cadmium		
8a	Cadmium und Cadmiumverbindungen in Thermosicherungen vom Typ "one shot pellet"	Am 1. Januar 2012 abgelaufen. Danach Verwendung zulässig in Ersatzteilen für Elektro- und Elektronikgeräte, die vor dem 1. Januar 2013 in Verkehr gebracht wurden.
8b	Cadmium und Cadmiumverbindungen in elektrischen Kontakten	
30	Cadmiumlegierungen als elektrische/mechanische Lötmitte für elektrische Leiter, die direkt auf der Schwingspule in Wandlern in leistungsstarken Lautsprechern mit Schalldruck von 100 dB (A) und darüber verwendet werden	
38	Cadmium und Cadmiumoxid in Dickschichtpasten, die auf Aluminium-gebundenem Berylliumoxid eingesetzt werden	
39a	Cadmiumselenid in cadmiumhaltigen Halbleiter-Nanokristall-Quantenpunkten zur Wellenlängenwandlung in Anwendungen in Display-Beleuchtungen (< 0,2 µg Cd je mm ² Bildschirmfläche)	Läuft für alle Kategorien ab am 31. Oktober 2019.
40	Cadmium in Fotowiderständen für analoge Optokoppler in professionellen Audioanlagen	Am 31. Dezember 2013 abgelaufen.
13b. II	Cadmium in optischen Filtern aus Anlaufglas ohne die unter die Ausnahme 39 dieses Anhangs fallenden Verwendungen	Gilt für die Kategorien 1 bis 7 und 10; läuft am 21. Juli 2021 für die Kategorien 1 bis 7 und 10 ab.
Sechswertiges Chrom		
9	Sechswertiges Chrom als Korrosionsschutzmittel des Kohlenstoffstahl-Kühlsystems in Absorptionskühlschränken bis zu einem Massenanteil von 0,75 % in der Kühllösung	Gilt für die Kategorien 8, 9 und 11; läuft ab am — 21. Juli 2023 für die Kategorie 8 Medizinische In-vitro-Diagnostika; — 21. Juli 2024 für die Kategorie 9 Überwachungs- und Kontrollinstrumente in der Industrie und für die Kategorie 11; — 21. Juli 2021 für andere Unterkategorien der Kategorien 8 und 9.
9b	Blei in Lagerschalen und -buchsen für Kältemittel enthaltende Kompressoren für Heiz-, Belüftungs-, Klima- und Kühlanwendungen (HVACR)	Gilt für die Kategorien 8, 9 und 11; läuft ab am — 21. Juli 2023 für die Kategorie 8 Medizinische In-vitro-Diagnostika; — 21. Juli 2024 für die Kategorie 9 Überwachungs- und Kontrollinstrumente in der Industrie und für Kategorie 11; — 21. Juli 2021 für andere Unterkategorien der Kategorien 8 und 9.
9b.I	Blei in Lagerschalen und -buchsen für Kältemittel enthaltende hermetische Scrollkompressoren mit einer Nennleistungsaufnahme von 9 kW oder weniger für Heiz-, Belüftungs-, Klima- und Kühlanwendungen (HVACR)	Gilt für die Kategorie 1; läuft am 21. Juli 2019 ab.
Cadmium & Blei		
13b	Cadmium und Blei in Filterglas und Glas für Reflexionsstandards	Gilt für die Kategorien 8, 9 und 11; läuft ab am — 21. Juli 2023 für die Kategorie 8 Medizinische In-vitro-Diagnostika; — 21. Juli 2024 für die Kategorie 9 Überwachungs- und Kontrollinstrumente in der Industrie und für die Kategorie 11; — 21. Juli 2021 für andere Unterkategorien der Kategorien 8 und 9.
13b III	Cadmium und Blei in Glas für Reflexionsstandards	Gilt für die Kategorien 1 bis 7 und 10; läuft am 21. Juli 2021 für die Kategorien 1 bis 7 und 10 ab.
21	Blei und Cadmium in Druckfarben zum Aufbringen von Emails auf Glas wie Borosilicatglas und Kalk-Natron-Glas	
Quecksilber		
36	Quecksilber als Inhibitor zur Vermeidung von Kathodensputtering bei DC-Plasmasdisplays mit einem Gehalt von bis zu 30 mg pro Display	Am 1. Juli 2010 abgelaufen.
1 bis 4	in Leuchtmitteln	unterschiedliche Ablaufdaten



4 List of figures

Table 1: ChemVerbotsV Substance and substance groups.....	8
Table 2: Substance restriction – Packaging.....	9
Table 3: Substance regulations pursuant to ELV Directive	10
Table 4: Substance regulations pursuant to RoHS Directive	11
Table 5: Substance regulations of the Battery Directive	11

5 Change Index

Version	Datum	Änderung
1.0	2016/06/27	
1.1	2016/09/26	Amendments to Annex 1
1.2	2017/05/24	Introduction and inclusion of the Toy Safety Directive
1.3	2018/11/30	Link adaptations REACH, adaptation of ELV catalogue of exceptions, Regulation (EC) No 1935/2004 - food contact materials and articles
1.4	2020/27/01	New POP Regulation. Note VerpackG added. Tables RoHS and ELV adapted. Table ELV and RoHS exceptions updated.

