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EUROPEAN COMMISSION

Brussels,

Draft

**COMMISSION DIRECTIVE**

**amending Annex II to Directive 2000/53/EC of the European Parliament and of the Council on end-of-life vehicles**

**Text with EEA relevance**

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## COMMISSION DIRECTIVE

### **amending Annex II to Directive 2000/53/EC of the European Parliament and of the Council on end-of-life vehicles**

#### **Text with EEA relevance**

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Directive 2000/53/EC of the European Parliament and of the Council of 18 September 2000 on end-of-life vehicles<sup>1</sup>, and in particular Article 4(2)(b) thereof,

Whereas:

- (1) Directive 2000/53/EC prohibits the use of lead, mercury, cadmium or hexavalent chromium in materials and components of vehicles put on the market after 1 July 2003, other than in cases listed in Annex II to that Directive and under the conditions specified therein. Pursuant to Article 4(2)(b) of Directive 2000/53/EC, Annex II to that Directive should be adapted to scientific and technical progress by the Commission on a regular basis.
- (2) Annex II to Directive 2000/53/EC lists vehicle materials and components exempted from the prohibition set out in Article 4(2)(a) thereof. Vehicles put on the market before the expiry date of a given exemption may contain lead, mercury, cadmium or hexavalent chromium in materials and components listed in Annex II to Directive 2000/53/EC.
- (3) Certain materials and components containing lead, mercury, cadmium or hexavalent chromium should continue to be exempted from the prohibition set out in Article 4(2)(a) of Directive 2000/53/EC, since the use of such substances in those specific materials and components is still technically or scientifically unavoidable. It is therefore appropriate to prolong the expiry date of those exemptions until the use of the prohibited substances becomes avoidable.
- (4) The use of lead in automotive thermoelectric materials in application reducing CO<sub>2</sub> emissions by recuperation of exhaust heat is currently technically and scientifically unavoidable. Those materials should therefore be temporarily exempted from the prohibition set out in Article 4(2)(a) of Directive 2000/53/EC.
- (5) Certain materials and components containing lead, mercury, cadmium or hexavalent chromium should continue to be exempted from the prohibition set out in Article

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<sup>1</sup> OJ L 269, 21.10.2000, p. 34.

4(2)(a) of Directive 2000/53/EC without an expiry date, since the use of such substances in the specific materials and components listed in Annex II of that Directive is still technically or scientifically unavoidable.

- (6) Annex II to Directive 2000/53/EC provides that spare parts put on the market after 1 July 2003 which are used for vehicles put on the market before 1 July 2003 are exempted from the provisions of Article 4(2)(a) of that Directive. The exemption allows for the repair of vehicles put on the market before the entry into force of the prohibition set out in that Article with spare parts meeting the same quality and safety requirements as the parts with which they were originally equipped.
- (7) Spare parts for vehicles put on the market after 1 July 2003 but before the expiry date of a given exemption of Annex II to Directive 2000/53/EC are not covered by that exemption. Hence, spare parts for those vehicles should be heavy metal free, even if they are used to replace parts which originally contained heavy metals.
- (8) In certain cases it is technically impossible to repair vehicles with spare parts other than original ones as this would require changes in dimensional and functional properties of entire vehicle systems. Such spare parts cannot fit into the vehicle systems originally manufactured with parts containing heavy metals and these vehicles cannot be repaired and may need to be prematurely disposed of. Annex II to Directive 2000/53/EC should therefore be amended to enable the repair of such vehicles.
- (9) Directive 2000/53/EC should therefore be amended accordingly.
- (10) The measures provided for in this Decision are in accordance with the opinion of the Committee established under Article 18(1) of Directive 2006/12/CE of the European Parliament and of the Council of 5 April 2006 on waste<sup>2</sup>.

HAS ADOPTED THIS DIRECTIVE:

#### *Article 1*

Annex II to Directive 2000/53/EC is replaced by the text set out in the Annex to this Directive.

#### *Article 2*

Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 31 December 2011 at the latest. They shall forthwith communicate to the Commission the text of those provisions and a correlation table between those provisions and this Directive.

When Member States adopt those provisions, they shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication. Member States shall determine how such reference is to be made.

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<sup>2</sup> OJ L 114, 27.4.2006, p. 9.

*Article 3*

This Directive shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

*Article 4*

This Directive is addressed to the Member States.

Done at Brussels,

*For the Commission*

*The President*

**ANNEX**

*Annex II*

**Materials and components exempt from Article 4(2)(a)**

Materials and components	Scope and expiry date of the exemption	To be labelled or made identifiable in accordance with Article 4(2)(b)(iv)
<i>Lead as an alloying element</i>		
1(a). Steel for machining purposes and batch hot dip galvanised steel components containing up to 0.35% lead by weight		
1(b). 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	
2(a). 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	
2(b). Aluminium with a lead content up to 1.5% by weight	As spare parts for vehicles put on the market before 1 July 2008	
2(c). Aluminium with a lead content up to 0.4% by weight	(2)	
3. Copper alloy containing up to 4% lead by weight	(2)	
4(a). Bearing shells and bushes	As spare parts for vehicles put on the market before 1 July 2008	
4(b). Bearing shells and bushes in engines, transmissions and air conditioning compressors	1 July 2011 and spare parts for vehicles put on the market before 1 July 2011	

<i>Lead and lead compounds in components</i>		
5. Batteries	(2)	X
6. Vibration dampers	Vehicles type approved before 1 January 2016 and spare parts for these vehicles	X

7(a). 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	
7(b). 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	
7(c). 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	
8(a). 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	X(1)
8(b). 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	X(1)
8(c). Lead in finishes on terminals of electrolyte aluminium capacitors	Vehicles type approved before 1 January 2013 and spare parts for these vehicles	X(1)
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	X(1)
8(e). Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)	(3)	X(1)
8(f). Lead in compliant pin connector systems	(3)	X(1)



8(g). Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit flip chip packages	(3)	X(1)
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 <sup>2</sup> of projection area and a nominal current density of at least 1 A/mm <sup>2</sup> of silicon chip area	(3)	X(1)
8(i). Lead in solders in electrical glazing applications on glass except for soldering in laminated glazing	Vehicles type approved before 1 January 2013 and spare parts for these vehicles (4)	X(1)
8(j). Lead in solders for soldering in laminated glazing	(3)	X(1)
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).		X(5) (for components other than piezo in engines)
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	(3)	
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 <sup>2</sup> emissions by recuperation of exhaust heat	Vehicles type approved before 1 January 2019 and spare parts for these vehicles	X
<i>Hexavalent chromium</i>		
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 motorcaravans 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		X

<i>Mercury</i>		
15(a). Discharge lamps for headlight application	Vehicles type approved before 1 July 2012 and spare parts for these vehicles	X
15(b). Fluorescent tubes used in instrument panel displays	Vehicles type approved before 1	X

	July 2012 and spare parts for these vehicles	
<i>Cadmium</i>		
16. Batteries for electrical vehicles	As spare parts for vehicles put on the market before 31 December 2008	

(1) Dismantling if, in correlation with entry 10, an average threshold of 60 grams per vehicle is exceeded. For the application of this clause electronic devices not installed by the manufacturer on the production line shall not be taken into account.

(2) This exemption shall be reviewed in 2015.

(3) This exemption shall be reviewed in 2014.

(4) This exemption shall be reviewed before 1 January 2012.

(5) Dismantling if, in correlation with entries 8(a) to 8(j), an average threshold of 60 grams per vehicle is exceeded. For the application of this clause electronic devices not installed by the manufacturer on the production line shall not be taken into account.

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*Notes:*

- A maximum concentration value up to 0.1% by weight and in homogeneous material, for lead, hexavalent chromium and mercury and up to 0.01% by weight in homogeneous material for cadmium shall be tolerated.
- The re-use of parts of vehicles which were already on the market at the date of expiry of an exemption shall be allowed without limitation since it is not covered by Article 4(2)(a).
- Spare parts put on the market after 1 July 2003 which are used for vehicles put on the market before 1 July 2003 shall be exempted from the provisions of Article 4(2)(a)(\*).

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\* This clause shall not apply to wheel balance weights, carbon brushes for electric motors and brake linings.