

This text is meant purely as a documentation tool and has no legal effect. The Union's institutions do not assume any liability for its contents. The authentic versions of the relevant acts, including their preambles, are those published in the Official Journal of the European Union and available in EUR-Lex. Those official texts are directly accessible through the links embedded in this document

**► B DIRECTIVE 2000/53/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
of 18 September 2000
on end-of life vehicles
(OJ L 269, 21.10.2000, p. 34)**

Amended by:

		Official Journal		
		No	page	date
► <u>M1</u>	Commission Decision 2002/525/EC of 27 June 2002	L 170	81	29.6.2002
► <u>M2</u>	Commission Decision 2005/63/EC of 24 January 2005	L 25	73	28.1.2005
► <u>M3</u>	Commission Decision 2005/438/EC of 10 June 2005	L 152	19	15.6.2005
► <u>M4</u>	Council Decision 2005/673/EC of 20 September 2005	L 254	69	30.9.2005
► <u>M5</u>	Directive 2008/33/EC of the European Parliament and of the Council of 11 March 2008	L 81	62	20.3.2008
► <u>M6</u>	Commission Decision 2008/689/EC of 1 August 2008	L 225	10	23.8.2008
► <u>M7</u>	Directive 2008/112/EC of the European Parliament and of the Council of 16 December 2008	L 345	68	23.12.2008
► <u>M8</u>	Commission Decision 2010/115/EU of 23 February 2010	L 48	12	25.2.2010
► <u>M9</u>	Commission Directive 2011/37/EU of 30 March 2011	L 85	3	31.3.2011
► <u>M10</u>	Commission Directive 2013/28/EU of 17 May 2013	L 135	14	22.5.2013
► <u>M11</u>	Commission Directive (EU) 2016/774 of 18 May 2016	L 128	4	19.5.2016
► <u>M12</u>	Commission Directive (EU) 2017/2096 of 15 November 2017	L 299	24	16.11.2017
► <u>M13</u>	Directive (EU) 2018/849 of the European Parliament and of the Council of 30 May 2018	L 150	93	14.6.2018
► <u>M14</u>	Commission Delegated Directive (EU) 2020/362 of 17 December 2019	L 67	116	5.3.2020
► <u>M15</u>	Commission Delegated Directive (EU) 2020/363 of 17 December 2019	L 67	119	5.3.2020
► <u>M16</u>	Commission Delegated Directive (EU) 2023/544 of 16 December 2022	L 73	5	10.3.2023

Corrected by:

- **C1** Corrigendum, OJ L 103, 3.4.2020, p. 53 (2020/362)



**DIRECTIVE 2000/53/EC OF THE EUROPEAN PARLIAMENT
AND OF THE COUNCIL**
of 18 September 2000
on end-of life vehicles

Article 1

Objectives

This Directive lays down measures which aim, as a first priority, at the prevention of waste from vehicles and, in addition, at the reuse, recycling and other forms of recovery of end-of life vehicles and their components so as to reduce the disposal of waste, as well as at the improvement in the environmental performance of all of the economic operators involved in the life cycle of vehicles and especially the operators directly involved in the treatment of end-of life vehicles.

Article 2

Definitions

For the purposes of this Directive:

1. 'vehicle' means any vehicle designated as category M₁ or N₁ defined in Annex IIA to Directive 70/156/EEC, and three wheel motor vehicles as defined in Directive 92/61/EEC, but excluding motor tricycles;
2. 'end-of life vehicle' means a vehicle which is waste within the meaning of Article 1(a) of Directive 75/442/EEC;
3. 'producer' means the vehicle manufacturer or the professional importer of a vehicle into a Member State;
4. 'prevention' means measures aiming at the reduction of the quantity and the harmfulness for the environment of end-of life vehicles, their materials and substances;
5. 'treatment' means any activity after the end-of life vehicle has been handed over to a facility for depollution, dismantling, shearing, shredding, recovery or preparation for disposal of the shredder wastes, and any other operation carried out for the recovery and/or disposal of the end-of life vehicle and its components;
6. 'reuse' means any operation by which components of end-of life vehicles are used for the same purpose for which they were conceived;
7. 'recycling' means the reprocessing in a production process of the waste materials for the original purpose or for other purposes but excluding energy recovery. Energy recovery means the use of combustible waste as a means to generate energy through direct incineration with or without other waste but with recovery of the heat;
8. 'recovery' means any of the applicable operations provided for in Annex IIB to Directive 75/442/EEC;
9. 'disposal' means any of the applicable operations provided for in Annex IIA to Directive 75/442/EEC;

▼B

10. ‘economic operators’ means producers, distributors, collectors, motor vehicle insurance companies, dismantlers, shredders, recoverers, recyclers and other treatment operators of end-of life vehicles, including their components and materials;

▼M7

11. ‘hazardous substance’ means any substance which fulfils the criteria for any of the following hazard classes or categories set out in Annex I of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures ⁽¹⁾;

(a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F;

(b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10;

(c) hazard class 4.1;

(d) hazard class 5.1;

▼B

12. ‘shredder’ means any device used for tearing into pieces or fragmenting end-of life vehicles, including for the purpose of obtaining directly reusable metal scrap;

13. ‘dismantling information’ means all information required for the correct and environmentally sound treatment of end-of life vehicles. It shall be made available to authorised treatment facilities by vehicle manufacturers and component producers in the form of manuals or by means of electronic media (e.g. CD-ROM, on-line services).

*Article 3***Scope**

1. This Directive shall cover vehicles and end-of life vehicles, including their components and materials. Without prejudice to Article 5(4), third subparagraph, this shall apply irrespective of how the vehicle has been serviced or repaired during use and irrespective of whether it is equipped with components supplied by the producer or with other components whose fitting as spare or replacement parts accords with the appropriate Community provisions or domestic provisions.

2. This Directive shall apply without prejudice to existing Community legislation and relevant national legislation, in particular as regards safety standards, air emissions and noise controls and the protection of soil and water.

⁽¹⁾ OJ L 353, 31.12.2008, p. 1.

▼B

3. Where a producer only makes or imports vehicles that are exempt from Directive 70/156/EEC by virtue of Article 8(2)(a) thereof, Member States may exempt that producer and his vehicles from Articles 7(4), 8 and 9 of this Directive.
4. Special-purpose vehicles as defined in the second indent of Article 4(1)(a) of Directive 70/156/EEC shall be excluded from the provisions of Article 7 of this Directive.
5. For three-wheel motor vehicles only Articles 5(1), 5(2) and 6 of this Directive shall apply.

*Article 4***Prevention**

1. In order to promote the prevention of waste Member States shall encourage, in particular:
 - (a) vehicle manufacturers, in liaison with material and equipment manufacturers, to limit the use of hazardous substances in vehicles and to reduce them as far as possible from the conception of the vehicle onwards, so as in particular to prevent their release into the environment, make recycling easier, and avoid the need to dispose of hazardous waste;
 - (b) the design and production of new vehicles which take into full account and facilitate the dismantling, reuse and recovery, in particular the recycling, of end-of life vehicles, their components and materials;
 - (c) vehicle manufacturers, in liaison with material and equipment manufacturers, to integrate an increasing quantity of recycled material in vehicles and other products, in order to develop the markets for recycled materials.
2. (a) Member States shall ensure that materials and components of vehicles put on the market after 1 July 2003 do not contain lead, mercury, cadmium or hexavalent chromium other than in cases listed in Annex II under the conditions specified therein;

▼M13

- (b) The Commission is empowered to adopt delegated acts in accordance with Article 9a, amending Annex II on a regular basis to adapt it to technical and scientific progress, in order to:
 - (i) as necessary, establish maximum concentration values up to which the existence of the substances referred to in point (a) of this paragraph in specific materials and components of vehicles is to be tolerated;
 - (ii) exempt certain materials and components of vehicles from point (a) of this paragraph if the use of the substances referred to in that point is unavoidable;
 - (iii) delete materials and components of vehicles from Annex II if the use of the substances referred to in point (a) of this paragraph is avoidable;

▼M13

- (iv) under points (i) and (ii) designate those materials and components of vehicles that can be stripped before further treatment and require them to be labelled or made identifiable by other appropriate means.

The Commission shall adopt a separate delegated act with respect to each substance, material or component concerned by points (i) to (iv);

▼B

- (c) the Commission shall amend Annex II for the first time not later than 21 October 2001. In any case none of the exemptions listed therein shall be deleted from the Annex before 1 January 2003.

*Article 5***Collection**

1. Member States shall take the necessary measures to ensure:
 - that economic operators set up systems for the collection of all end-of life vehicles and, as far as technically feasible, of waste used parts removed when passenger cars are repaired,
 - the adequate availability of collection facilities within their territory.
2. Member States shall also take the necessary measures to ensure that all end-of life vehicles are transferred to authorised treatment facilities.
3. Member States shall set up a system according to which the presentation of a certificate of destruction is a condition for deregistration of the end-of life vehicle. This certificate shall be issued to the holder and/or owner when the end-of life vehicle is transferred to a treatment facility. Treatment facilities, which have obtained a permit in accordance with Article 6, shall be permitted to issue a certificate of destruction. Member States may permit producers, dealers and collectors on behalf of an authorised treatment facility to issue certificates of destruction provided that they guarantee that the end-of life vehicle is transferred to an authorised treatment facility and provided that they are registered with public authorities.

Issuing the certificate of destruction by treatment facilities or dealers or collectors on behalf of an authorised treatment facility does not entitle them to claim any financial reimbursement, except in cases where this has been explicitly arranged by Member States.

▼B

Member States which do not have a deregistration system at the date of entry into force of this Directive shall set up a system according to which a certificate of destruction is notified to the relevant competent authority when the end-of life vehicle is transferred to a treatment facility and shall otherwise comply with the terms of this paragraph. Member States making use of this subparagraph shall inform the Commission of the reasons thereof.

4. Member States shall take the necessary measures to ensure that the delivery of the vehicle to an authorised treatment facility in accordance with paragraph 3 occurs without any cost for the last holder and/or owner as a result of the vehicle's having no or a negative market value.

Member States shall take the necessary measures to ensure that producers meet all, or a significant part of, the costs of the implementation of this measure and/or take back end-of life vehicles under the same conditions as referred to in the first subparagraph.

Member States may provide that the delivery of end-of life vehicles is not fully free of charge if the end-of life vehicle does not contain the essential components of a vehicle, in particular the engine and the coachwork, or contains waste which has been added to the end-of life vehicle.

The Commission shall regularly monitor the implementation of the first subparagraph to ensure that it does not result in market distortions, and if necessary shall propose to the European Parliament and the Council an amendment thereto.

▼M13

5. Member States shall take the necessary measures to ensure that their competent authorities mutually recognise and accept the certificates of destruction issued in other Member States in accordance with paragraph 3 of this Article.

The Commission is empowered to adopt delegated acts in accordance with Article 9a in order to supplement this Directive by establishing minimum requirements for the certificate of destruction.

▼B*Article 6***Treatment****▼M13**

1. Member States shall take the necessary measures to ensure that all end-of-life vehicles are stored (even temporarily) and treated in accordance with the waste hierarchy and the general requirements laid down in Article 4 of Directive 2008/98/EC of the European Parliament and of the Council ⁽¹⁾, and in compliance with the minimum technical requirements set out in Annex I to this Directive, without prejudice to national regulations on health and environment.

▼B

2. Member States shall take the necessary measures to ensure that any establishment or undertaking carrying out treatment operations obtains a permit from or be registered with the competent authorities, in compliance with Articles 9, 10 and 11 of Directive 75/442/EEC.

⁽¹⁾ Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (OJ L 312, 22.11.2008, p. 3).

▼B

The derogation from the permit requirement referred to in Article 11(1)(b) of Directive 75/442/EEC may apply to recovery operations concerning waste of end-of life vehicles after they have been treated according to Annex 1(3) to this Directive if there is an inspection by the competent authorities before the registration. This inspection shall verify:

- (a) type and quantities of waste to be treated;
- (b) general technical requirements to be complied with;
- (c) safety precautions to be taken,

in order to achieve the objectives referred to in Article 4 of Directive 75/442/EEC. This inspection shall take place once a year. Member States using the derogation shall send the results to the Commission.

3. Member States shall take the necessary measures to ensure that any establishment or undertaking carrying out treatment operations fulfils at least the following obligations in accordance with Annex I:

- (a) end-of life vehicles shall be stripped before further treatment or other equivalent arrangements are made in order to reduce any adverse impact on the environment. Components or materials labelled or otherwise made identifiable in accordance with Article 4(2) shall be stripped before further treatment;
- (b) hazardous materials and components shall be removed and segregated in a selective way so as not to contaminate subsequent shredder waste from end-of life vehicles;
- (c) stripping operations and storage shall be carried out in such a way as to ensure the suitability of vehicle components for reuse and recovery, and in particular for recycling.

Treatment operations for depollution of end-of life vehicles as referred to in Annex I(3) shall be carried out as soon as possible.

4. Member States shall take the necessary measures to ensure that the permit or registration referred to in paragraph 2 includes all conditions necessary for compliance with the requirements of paragraphs 1, 2 and 3.

5. Member States shall encourage establishments or undertakings, which carry out treatment operations to introduce, certified environmental management systems.

▼M13

6. The Commission is empowered to adopt delegated acts in accordance with Article 9a, amending Annex I to adapt it to technical and scientific progress.

▼B*Article 7***Reuse and recovery**

1. Member States shall take the necessary measures to encourage the reuse of components which are suitable for reuse, the recovery of components which cannot be reused and the giving of preference to recycling when environmentally viable, without prejudice to requirements regarding the safety of vehicles and environmental requirements such as air emissions and noise control.

2. Member States shall take the necessary measures to ensure that the following targets are attained by economic operators:

- (a) no later than 1 January 2006, for all end-of life vehicles, the reuse and recovery shall be increased to a minimum of 85 % by an average weight per vehicle and year. Within the same time limit the reuse and recycling shall be increased to a minimum of 80 % by an average weight per vehicle and year;

for vehicles produced before 1 January 1980, Member States may lay down lower targets, but not lower than 75 % for reuse and recovery and not lower than 70 % for reuse and recycling. Member States making use of this subparagraph shall inform the Commission and the other Member States of the reasons therefor;

- (b) no later than 1 January 2015, for all end-of life vehicles, the reuse and recovery shall be increased to a minimum of 95 % by an average weight per vehicle and year. Within the same time limit, the re-use and recycling shall be increased to a minimum of 85 % by an average weight per vehicle and year.

By 31 December 2005 at the latest the European Parliament and the Council shall re-examine the targets referred to in paragraph (b) on the basis of a report of the Commission, accompanied by a proposal. In its report the Commission shall take into account the development of the material composition of vehicles and any other relevant environmental aspects related to vehicles.

▼M13

The Commission may adopt implementing acts concerning the detailed rules necessary to control compliance of Member States with the targets set out in the first subparagraph of this paragraph. When preparing such rules, the Commission shall take into account all relevant factors, inter alia, the availability of data and the issue of exports and imports of end-of-life vehicles. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 11(2).

▼B

3. On the basis of a proposal from the Commission, the European Parliament and the Council shall establish targets for reuse and recovery and for reuse and recycling for the years beyond 2015.

▼B

4. In order to prepare an amendment to Directive 70/156/EEC, the Commission shall promote the preparation of European standards relating to the dismantlability, recoverability and recyclability of vehicles. Once the standards are agreed, but in any case no later than by the end of 2001, the European Parliament and the Council, on the basis of a proposal from the Commission, shall amend Directive 70/156/EEC so that vehicles type-approved in accordance with that Directive and put on the market after three years after the amendment of the Directive 70/156/EEC are re-usable and/or recyclable to a minimum of 85 % by weight per vehicle and are re-usable and/or recoverable to a minimum of 95 % by weight per vehicle.

5. In proposing the amendment to Directive 70/156/EEC relating to the ability to be dismantled, recoverability and recyclability of vehicles, the Commission shall take into account as appropriate the need to ensure that the reuse of components does not give rise to safety or environmental hazards.

*Article 8***Coding standards/dismantling information**

1. Member States shall take the necessary measures to ensure that producers, in concert with material and equipment manufacturers, use component and material coding standards, in particular to facilitate the identification of those components and materials which are suitable for reuse and recovery.

▼M13

2. The Commission is empowered to adopt delegated acts in accordance with Article 9a, in order to supplement this Directive by establishing the standards referred to in paragraph 1 of this Article. When preparing such standards, the Commission shall take account of the work going on in this area in the relevant international forums. The Commission shall contribute to this work as appropriate.

▼B

3. Member States shall take the necessary measures to ensure that producers provide dismantling information for each type of new vehicle put on the market within six months after the vehicle is put on the market. This information shall identify, as far as it is needed by treatment facilities in order to comply with the provisions of this Directive, the different vehicle components and materials, and the location of all hazardous substances in the vehicles, in particular with a view to the achievement of the objectives laid down in Article 7.

4. Without prejudice to commercial and industrial confidentiality, Member States shall take the necessary measures to ensure that manufacturers of components used in vehicles make available to authorised treatment facilities, as far as it is requested by these facilities, appropriate information concerning dismantling, storage and testing of components which can be reused.

▼ B*Article 9***Reporting and information****▼ M13**

1a. Member States shall report the data concerning the implementation of Article 7(2) for each calendar year to the Commission.

They shall report the data electronically within 18 months of the end of the reporting year for which the data are collected. The data shall be reported in the format established by the Commission in accordance with paragraph 1d of this Article.

The first reporting period shall start in the first full calendar year after the adoption of the implementing act that establishes the format for reporting, in accordance with paragraph 1d of this Article, and it shall cover the data for that reporting period.

1b. The data reported by Member States in accordance with paragraph 1a shall be accompanied by a quality check report.

1c. The Commission shall review the data reported in accordance with paragraph 1a and publish a report on the results of its review. The report shall assess the organisation of the data collection, the sources of data and the methodology used in Member States as well as the completeness, reliability, timeliness and consistency of that data. The assessment may include specific recommendations for improvement. The report shall be drawn up after the first reporting of the data by the Member States and every four years thereafter.

1d. The Commission shall adopt implementing acts laying down the format for reporting the data referred to in paragraph 1a of this Article. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 11(2).

▼ B

2. Member States shall require in each case the relevant economic operators to publish information on:

- the design of vehicles and their components with a view to their recoverability and recyclability,
- the environmentally sound treatment of end-of life vehicles, in particular the removal of all fluids and dismantling,
- the development and optimisation of ways to reuse, recycle and recover end-of life vehicles and their components,
- the progress achieved with regard to recovery and recycling to reduce the waste to be disposed of and to increase the recovery and recycling rates.

The producer must make this information accessible to the prospective buyers of vehicles. It shall be included in promotional literature used in the marketing of the new vehicle.

▼ M13*Article 9a***Exercise of the delegation**

1. The power to adopt delegated acts is conferred to the Commission subject to the conditions laid down in this Article.
2. The power to adopt delegated acts referred to in point (b) of Article 4(2) and in Articles 5(5), 6(6) and 8(2) shall be conferred on the Commission for a period of five years from 4 July 2018. The Commission shall draw up a report in respect of the delegation of power not later than nine months before the end of the five-year period. The delegation of power shall be tacitly extended for periods of an identical duration, unless the European Parliament or the Council opposes such extension not later than three months before the end of each period.
3. The delegation of power referred to in point (b) of Article 4(2) and in Articles 5(5), 6(6) and 8(2) may be revoked at any time by the European Parliament or by the Council. A decision to revoke shall put an end to the delegation of the power specified in that decision. It shall take effect the day following the publication of the decision in the *Official Journal of the European Union* or at a later date specified therein. It shall not affect the validity of any delegated acts already in force.
4. Before adopting a delegated act, the Commission shall consult experts designated by each Member State in accordance with the principles laid down in the Interinstitutional Agreement of 13 April 2016 on Better Law-Making ⁽¹⁾.
5. As soon as it adopts a delegated act, the Commission shall notify it simultaneously to the European Parliament and to the Council.
6. A delegated act adopted pursuant to point (b) of Article 4(2) and to Articles 5(5), 6(6) and 8(2) shall enter into force only if no objection has been expressed either by the European Parliament or by the Council within a period of two months of notification of that act to the European Parliament and to the Council or if, before the expiry of that period, the European Parliament and the Council have both informed the Commission that they will not object. That period shall be extended by two months at the initiative of the European Parliament or of the Council.

▼ B*Article 10***Implementation**

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 21 April 2002. They shall immediately inform the Commission thereof.

When Member States adopt these measures, these shall contain a reference to this Directive or shall be accompanied by such reference on the occasion of their official publication. The methods of making such a reference shall be laid down by Member States.

2. Member States shall communicate to the Commission the text of the main provisions of domestic law, which they adopt in the field governed by this Directive.

⁽¹⁾ OJ L 123, 12.5.2016, p. 1.

▼B

3. Provided that the objectives set out in this Directive are achieved, Member States may transpose the provisions set out in Articles 4(1), 5(1), 7(1), 8(1), 8(3) and 9(2) and specify the detailed rules of implementation of Article 5(4) by means of agreements between the competent authorities and the economic sectors concerned. Such agreements shall meet the following requirements

- (a) agreements shall be enforceable;
- (b) agreements need to specify objectives with the corresponding deadlines;
- (c) agreements shall be published in the national official journal or an official document equally accessible to the public and transmitted to the Commission;
- (d) the results achieved under an agreement shall be monitored regularly, reported to the competent authorities and to the Commission and made available to the public under the conditions set out in the agreement;
- (e) the competent authorities shall make provisions to examine the progress reached under an agreement;
- (f) in case of non-compliance with an agreement Member States must implement the relevant provisions of this Directive by legislative, regulatory or administrative measures.

▼M13*Article 10a***Review**

By 31 December 2020, the Commission shall review this Directive, and to that end, shall submit a report to the European Parliament and to the Council, accompanied, if appropriate, by a legislative proposal.

*Article 11***Committee procedure**

1. The Commission shall be assisted by a committee. That committee shall be a committee within the meaning of Regulation (EU) No 182/2011 of the European Parliament and of the Council ⁽¹⁾.

2. Where reference is made to this paragraph, Article 5 of Regulation (EU) No 182/2011 shall apply.

Where the committee delivers no opinion, the Commission shall not adopt the draft implementing act and the third subparagraph of Article 5(4) of Regulation (EU) No 182/2011 shall apply.

▼B*Article 12***Entry into force**

1. This Directive shall enter into force on the day of its publication in the *Official Journal of the European Communities*.

⁽¹⁾ Regulation (EU) No 182/2011 of the European Parliament and of the Council of 16 February 2011 laying down the rules and general principles concerning mechanisms for control by Member States of the Commission's exercise of implementing powers (OJ L 55, 28.2.2011, p. 13).

▼B

2. Article 5(4) shall apply:
 - as from 1 July 2002 for vehicles put on the market as from this date,
 - as from 1 January 2007 for vehicles put on the market before the date referred to in the first indent.
3. Member States may apply Article 5(4) in advance of the dates set out in paragraph 2.

Article 13

Addressees

This Directive is addressed to the Member States.

▼B*ANNEX I***Minimum technical requirements for treatment in accordance with Article 6(1) and (3)**

1. Sites for storage (including temporary storage) of end-of-life vehicles prior to their treatment:
 - impermeable surfaces for appropriate areas with the provision of spillage collection facilities, decanters and cleanser-degreasers,
 - equipment for the treatment of water, including rainwater, in compliance with health and environmental regulations.
2. Sites for treatment:
 - impermeable surfaces for appropriate areas with the provision of spillage collection facilities, decanters and cleanser-degreasers,
 - appropriate storage for dismantled spare parts, including impermeable storage for oil-contaminated spare parts,
 - appropriate containers for storage of batteries (with electrolyte neutralisation on site or elsewhere), filters and PCB/PCT-containing condensers,
 - appropriate storage tanks for the segregated storage of end-of-life vehicle fluids: fuel, motor oil, gearbox oil, transmission oil, hydraulic oil, cooling liquids, antifreeze, brake fluids, battery acids, air-conditioning system fluids and any other fluid contained in the end-of-life vehicle,
 - equipment for the treatment of water, including rainwater, in compliance with health and environmental regulations,
 - appropriate storage for used tyres, including the prevention of fire hazards and excessive stockpiling.
3. Treatment operations for depollution of end-of-life vehicles:
 - removal of batteries and liquified gas tanks,
 - removal or neutralisation of potential explosive components, (e.g. air bags),
 - removal and separate collection and storage of fuel, motor oil, transmission oil, gearbox oil, hydraulic oil, cooling liquids, antifreeze, brake fluids, air-conditioning system fluids and any other fluid contained in the end-of-life vehicle, unless they are necessary for the re-use of the parts concerned,
 - removal, as far as feasible, of all components identified as containing mercury.
4. Treatment operations in order to promote recycling:
 - removal of catalysts,
 - removal of metal components containing copper, aluminium and magnesium if these metals are not segregated in the shredding process,

▼ B

- removal of tyres and large plastic components (bumpers, dashboard, fluid containers, etc), if these materials are not segregated in the shredding process in such a way that they can be effectively recycled as materials,
 - removal of glass.
5. Storage operations are to be carried out avoiding damage to components containing fluids or to recoverable components and spare parts.

▼ **M16***ANNEX II***Materials and components exempt from Article 4(2), point (a)**

A maximum concentration value of substances up to 0,1 % by weight in homogeneous material for lead, hexavalent chromium and mercury and up to 0,01 % by weight in homogeneous material for cadmium shall be tolerated.

Spare parts put on the market after 1 July 2003 which are used for vehicles put on the market before 1 July 2003, except for wheel balance weights, carbon brushes for electric motors and brake linings, shall be exempted from Article 4(2), point (a), of Directive 2000/53/EC.

Materials and components	Scope and expiry date of the exemption	To be labelled or made identifiable in accordance with Article 4(2), point (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)(i). Aluminium alloys for machining purposes with a lead content up to 0,4 % by weight	Vehicles type-approved before 1 January 2028 and spare parts for these vehicles	
2(c)(ii). Aluminium alloys not included in entry 2(c)(i) with a lead content up to 0,4 % by weight ⁽²⁾	⁽¹⁾	
3. Copper alloys containing up to 4 % lead by weight	⁽³⁾	
4(a). Bearing shells and bushes	As spare parts for vehicles put on the market before 1 July 2008	

▼ **M16**

Materials and components	Scope and expiry date of the exemption	To be labelled or made identifiable in accordance with Article 4(2), point (b)(iv)
4(b). 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

5(a). Lead in batteries used in high-voltage systems ⁽⁴⁾ that are used only for propulsion in M1 and N1 vehicles	Vehicles type approved before 1 January 2019 and spare parts for these vehicles	X
5(b)(i). Lead in batteries: (1) used in 12 V applications (2) used in 24 V applications in special purpose vehicles as defined in Article 3 of Regulation (EU) 2018/858 ⁽¹⁾ of the European Parliament and of the Council	⁽³⁾	X
5(b)(ii). Lead in batteries used in applications not included in entry 5(a) or entry 5(b)(i)	Vehicles type approved before 1 January 2024 and spare parts for these vehicles	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	

⁽¹⁾ Regulation (EU) 2018/858 of the European Parliament and of the Council of 30 May 2018 on the approval and market surveillance of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles, amending Regulations (EC) No 715/2007 and (EC) No 595/2009 and repealing Directive 2007/46/EC (OJ L 151, 14.6.2018, p. 1).

▼ **M16**

Materials and components	Scope and expiry date of the exemption	To be labelled or made identifiable in accordance with Article 4(2), point (b)(iv)
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 ⁽⁵⁾
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 ⁽⁵⁾
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 ⁽⁵⁾
8(d). Lead used in soldering on glass in mass airflow sensors	Vehicles type approved before 1 January 2015 and spare parts of these vehicles	X ⁽⁵⁾
8(e). Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)	⁽¹⁾	X ⁽⁵⁾
8(f)(i). Lead in compliant pin connector systems	Vehicles type approved before 1 January 2017 and spare parts for these vehicles	X ⁽⁵⁾
8(f)(ii). Lead in compliant pin connector systems other than the mating area of vehicle harness connectors	Vehicles type approved before 1 January 2024 and spare parts for these vehicles	X ⁽⁵⁾

▼ **M16**

Materials and components	Scope and expiry date of the exemption	To be labelled or made identifiable in accordance with Article 4(2), point (b)(iv)
8(g)(i). Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit flip chip packages	Vehicles type approved before 1 October 2022 and spare parts for these vehicles	X ⁽⁵⁾
8(g)(ii). Lead in solders to complete a viable electrical connection between the semiconductor die and the carrier within integrated circuit flip chip packages where that electrical connection consists of any of the following: (1) a semiconductor technology node of 90 nm or larger; (2) a single die of 300 mm ² or larger in any semiconductor technology node; (3) stacked die packages with dies of 300 mm ² or larger, or silicon interposers of 300mm ² or larger.	(1) Vehicles type-approved from 1 October 2022 and spare parts for these vehicles	X ⁽⁵⁾
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	X ⁽⁵⁾
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	X ⁽⁵⁾
8(j). Lead in solders for soldering of laminated glazing	Vehicles type approved before 1 January 2020 and spare parts for these vehicles	X ⁽⁵⁾

▼ **M16**

Materials and components	Scope and expiry date of the exemption	To be labelled or made identifiable in accordance with Article 4(2), point (b)(iv)
8(k). Soldering of heating applications with 0,5 A or more of heat current per related solder joint to single panes of laminated glazings not exceeding wall thickness of 2,1 mm. This exemption does not cover soldering to contacts embedded in the intermediate polymer.	Vehicles type approved before 1 January 2024 and spare parts for these vehicles	X ⁽⁵⁾
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: (i) glass in bulbs and glaze of spark plugs, (ii) dielectric ceramic materials of components listed under 10(b), 10(c) and 10(d).		X ⁽⁶⁾ (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	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	

▼ **M16**

Materials and components	Scope and expiry date of the exemption	To be labelled or made identifiable in accordance with Article 4(2), point (b)(iv)
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	X

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. 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: (a) designed to operate fully or partly with electrical heater, having an average utilised electrical power input < 75W at constant running conditions; (b) designed to operate fully or partly with electrical heater, having an average utilised electrical power input ≥ 75W at constant running conditions; (c) designed to fully operate with non-electrical heater.	For (a): Vehicles type approved before 1 January 2020 and spare parts for these vehicles For (b): Vehicles type approved before 1 January 2026 and spare parts for these vehicles	X

Mercury

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 July 2012 and spare parts for these vehicles	X

▼ **M16**

Materials and components	Scope and expiry date of the exemption	To be labelled or made identifiable in accordance with Article 4(2), point (b)(iv)
<i>Cadmium</i>		
16. Batteries for electrical vehicles	As spare parts for vehicles put on the market before 31 December 2008	

Notes to the table:

- (¹) This exemption shall be reviewed in 2024.
- (²) Applies to aluminium alloys where lead is not intentionally introduced, but is present due to the use of recycled aluminium.
- (³) This exemption shall be reviewed in 2025.
- (⁴) Systems that have a voltage of > 75 V DC as provided for in Article 1 of Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits (OJ L 96, 29.3.2014, p. 357).
- (⁵) Dismantling if, in correlation with entry 10(a), an average threshold of 60 grams per vehicle is exceeded. For the purposes of this note electronic devices not installed by the manufacturer on the production line shall not be taken into account.
- (⁶) Dismantling if, in correlation with entries 8(a) to 8(k), an average threshold of 60 grams per vehicle is exceeded. For the purposes of this note electronic devices not installed by the manufacturer on the production line shall not be taken into account.