

Consumer products

HCT-201804-04

REACH Annex XVII the latest revision

RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND

USE OF CERTAIN DANGEROUS SUBSTANCES

2018.04.24 updated

Designation of the substance, of the group of substances or of the mixture	Conditions of restriction
Polychlorinated terphenyls (PCTs)	Shall not be placed on the market, or used: — as substances, — in mixtures, including waste oils, or in equipment, in concentrations greater than 50 mg/kg (0,005 % by weight).
2. Chloroethene (vinyl chloride) CAS No 75-01-4 EC No 200-831-0	Shall not be used as propellant in aerosols for any use. Aerosols dispensers containing the substance as propellant shall not be placed on the market.
3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: (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;	 Shall not be used in: ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays, tricks and jokes, games for one or more participants, or any article intended to be used as such, even with ornamental aspects, Articles not complying with paragraph 1 shall not be placed on the market. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they:



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

- (c) hazard class 4.1;
- (d) hazard class 5.1.

- 5. Without prejudice to the implementation of other Community provisions relating trexo the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met:
- (a) lamp oils, labelled with R65 or H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows:

'Keep lamps filled with this liquid out of the reach of children'; and, by 1 December 2010, 'Just a sip of lamp oil

- or even sucking the wick of lamps
- may lead to life-threatening lung l damage';
- (b) grill lighter fluids, labelled with R65 or H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: 'Just a sip of grill lighter may lead to life threatening lung damage';
- (c) lamp oils and grill lighters, labelled with R65 or H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.
- 6. No later than 1 June 2014, the Commission shall request the European Chemicals Agency to prepare a dossier, in accordance with Article 69 of the present Regulation with a view to ban, if appropriate, grill lighter fluids and fuel for decorative lamps, labelled R65 or H304, intended for supply to the general public.
- 7. Natural or legal persons placing on the market for the first time lamp oils and grill lighter fluids, labelled with R65 or H304, shall by 1 December 2011, and annually thereafter, provide data on alternatives to lamp oils and grill lighter fluids labelled R65 or H304 to the competent authority in the Member State concerned. Member States shall make those data available to the Commission.

4. Tris (2,3 dibromopropyl) phosphate

CAS No 126-72-7

- 1. Shall not be used in textile articles, such as garments, undergarments and linen, intended to come into contact with the skin.
- 2. Articles not complying with paragraph 1 shall not be placed on the market.

5. BenzeneCAS No 71-43-2EC No 200-753-7

- 1. Shall not be used in toys or parts of toys where the concentration of benzene in the free state is greater than 5 mg/kg (0,0005 %) of the weight of the toy or part of toy.
- 2. Toys and parts of toys not complying with paragraph 1 shall not be placed on the market.
- 3. Shall not be placed on the market, or used,
- as a substance.
- as a constituent of other substances, or in mixtures, in concentrations equal to, or greater than 0,1 % by weight.
- 4. However, paragraph 3 shall not apply to:
- (a) motor fuels which are covered by Directive 98/70/EC;
- (b) substances and mixtures for use in industrial processes not allowing for the emission of benzene in quantities in excess of those laid down in existing legislation.



- 6. Asbestos fibres
- (a) Crocidolite CAS No 12001-28-4
- (b) Amosite CAS No 12172-73-5
- (c) Anthophyllite CAS No 77536-67-5
- (d) Actinolite CAS No 77536-66-4
- (e) Tremolite CAS No 77536-68-6
- (f) Chrysotile CAS No 12001-29-5 CAS No 132207-32-0

1. The manufacture, placing on the market and use of these fibres and of articles and mixtures containing these fibres added intentionally is prohibited.

However, if the use of diaphragms containing chrysotile for electrolysis installations in use on 13 July 2016 had been exempted by a Member State in accordance with the version of this paragraph in force until that date, the first subparagraph shall not apply until 1 July 2025 to the use in those installations of such diaphragms or of chrysotile used exclusively in the maintenance of such diaphragms, provided that such use is carried out in compliance with the conditions of a permit set in accordance with Directive 2010/75/EU of the European Parliament and of the Council (*).

Any downstream user benefiting from such an exemption shall send, by 31 January of each calendar year to the Member State in which the relevant electrolysis installation is located, a report indicating the amount of chrysotile used in diaphragms pursuant to the exemption. The Member State shall transmit a copy to the European Commission. Where, in order to protect the health and safety of workers, a Member State requires monitoring of chrysotile in air by downstream users, the results shall be included in that report.

2. The use of articles containing asbestos fibres referred to in paragraph 1 which were already installed and/or in service before 1 January 2005 shall continue to be permitted until they are disposed of or reach the end of their service life. However, Member States may, for reasons of protection of human health, restrict, prohibit or make subject to specific conditions, the use of such articles before they are disposed of or reach the end of their service life.

Member States may allow placing on the market of articles in their entirety containing asbestos fibres referred to in paragraph 1 which were already installed and/or in service before 1 January 2005, under specific conditions ensuring a high level of protection of human health. Member States shall communicate these national measures to the Commission by 1 June 2011. The Commission shall make this information publicly available.

- 3. Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances and mixtures, the placing on the market and use of articles containing these fibres, as permitted according to the preceding derogations, shall be permitted only if suppliers ensure before the placing on the market that articles bear a label in accordance with Appendix 7 to this Annex.
- 7. Tris(aziridinyl)phosphinox ide

CAS No 545-55-1 EC No 208-892-5

- 1. Shall not be used in textile articles, such as garments, undergarments and linen, intended to come into contact with the skin.
- 2. Articles not complying with paragraph 1 shall not be placed on the market.



8. Polybromobiphenyls; Polybrominatedbiphenyls (PBB) CAS No 59536-65-1	 Shall not be used in textile articles, such as garments, undergarments and linen, intended to come into contact with the skin. Articles not complying with paragraph 1 shall not be placed on the market.
9. (a) Soap bark powder (Quillajasaponaria) and its derivatives containing saponines CAS No 68990-67-0 EC 273-620-4 (b) Powder of the roots of Helleborusviridis and Hell eborusniger (c) Powder of the roots of Veratrum album and Veratrumnigrum (d) Benzidine and/or its derivatives CAS No 92-87-5 EC No 202-199-1 (e) o-Nitrobenzaldehyde CAS No 552-89-6 EC No 209-025-3 (f) Wood powder	 Shall not be used, in jokes and hoaxes or in mixtures or articles intended to be used as such, for instance as a constituent of sneezing powder and stink bombs. Jokes and hoaxes, or mixtures or articles intended to be used as such, not complying with paragraph 1 shall not be placed on the market. However, paragraphs 1 and 2 shall not apply to stink bombs containing not more than 1,5 ml of liquid.
10. (a) Ammonium sulphide CAS No 12135-76-1 EC No 235-223-4 (b) Ammonium hydrogen sulphide CAS No 12124-99-1 EC No 235-184-3 (c) Ammonium polysulphide CAS No 9080-17-5 EC No 232-989-1	 Shall not be used, in jokes and hoaxes or in mixtures or articles intended to be used as such, for instance as a constituent of sneezing powder and stink bombs. Jokes and hoaxes, or mixtures or articles intended to be used as such, not complying with paragraph 1 shall not be placed on the market. However, paragraphs 1 and 2 shall not apply to stink bombs containing not more than 1,5 ml of liquid.

EC No 209-943-4

CAS No 1319-46-6

EC No 215-290-6

(b) Trilead-bis(carbonate)-di

hydroxide 2Pb CO₃-Pb(OH)₂



11. Volatile esters of bromoacetic acids: (a) Methyl bromoacetate CAS No 96-32-2 EC No 202-499-2 (b) Ethyl bromoacetate CAS No 105-36-2 EC No 203-290-9 (c) Propyl bromoacetate CAS No 35223-80-4 (d) Butyl bromoacetate CAS No 18991-98-5 EC No 242-729-9	 Shall not be used, in jokes and hoaxes or in mixtures or articles intended to be used as such, for instance as a constituent of sneezing powder and stink bombs. Jokes and hoaxes, or mixtures or articles intended to be used as such, not complying with paragraph 1 shall not be placed on the market. However, paragraphs 1 and 2 shall not apply to stink bombs containing not more than 1,5 ml of liquid.
12. 2-Naphthylamine CAS No 91-59-8 EC No 202-080-4 and its salts 13. Benzidine CAS No 92-87-5 EC No 202-199-1 and its salts 14. 4-Nitrobiphenyl CAS No 92-93-3 Einecs EC No 202-204-7 15. 4-Aminobiphenyl xenylamine CAS No 92-67-1 Einecs EC No 202-177-1 and its salts	Shall not be placed on the market, or used, as substances or in mixtures in concentrations greater than 0,1 % by weight.
16. Lead carbonates: (a) Neutral anhydrous carbonate (PbCO ₃) CAS No 598-63-0	Shall not be placed on the market, or used, as substances or in mixtures, where the substance or mixture is intended for use as paint. However, Member States may, in accordance with the provisions of International

Labour Organization (ILO) Convention 13, permit the use on their territory of the

substance or mixture for the restoration and maintenance of works of art and historic

buildings and their interiors, as well as the placing on the market for such use. Where

a Member State makes use of this derogation, it shall inform the Commission thereof.



17. Lead sulphates: (a) PbSO ₄ CAS No 7446-14-2 EC No 231-198-9 (b) Pb _x SO ₄ CAS No 15739-80-7 EC No 239-831-0	Shall not be placed on the market, or used, as substances or in mixtures, where the substance or mixture is intended for use as paint. However, Member States may, in accordance with the provisions of International Labour Organization (ILO) Convention 13, permit the use on their territory of the substance or mixture for the restoration and maintenance of works of art and historic buildings and their interiors, as well as the placing on the market for such use. Where a Member State makes use of this derogation, it shall inform the Commission thereof.
18. Mercury compounds	Shall not be placed on the market, or used, as substances or in mixtures where the substance or mixture is intended for use: (a) to prevent the fouling by micro-organisms, plants or animals of: — the hulls of boats, — cages, floats, nets and any other appliances or equipment used for fish or shellfish farming, — any totally or partly submerged appliances or equipment; (b) in the preservation of wood; (c) in the impregnation of heavy-duty industrial textiles and yarn intended for their manufacture; (d) in the treatment of industrial waters, irrespective of their use.



18.a. Mercury CAS No 7439-97-6 EC No 231-106-7

- 1. Shall not be placed on the market:
- (a) in fever thermometers;
- (b) in other measuring devices intended for sale to the general public (such as manometers, barometers, sphygmomanometers, thermometers other than fever thermometers).
- 2. The restriction in paragraph 1 shall not apply to measuring devices that were in use in the Community before 3 April 2009. However Member States may restrict or prohibit the placing on the market of such measuring devices.
- 3. The restriction in paragraph 1(b) shall not apply to:
- (a) measuring devices more than 50 years old on 3 October 2007;
- (b) barometers (except barometers within point (a)) until 3 October 2009.
- 5. The following mercury-containing measuring devices intended for industrial and professional uses shall not be placed on the market after 10 April 2014:
- (a) barometers;
- (b) hygrometers;
- (c) manometers;
- (d) sphygmomanometers;
- (e) strain gauges to be used with plethysmographs;
- (f) tensiometers;
- (g) thermometers and other non-electrical thermometric applications.

The restriction shall also apply to measuring devices under points (a) to (g) which are placed on the market empty if intended to be filled with mercury.

- 6. The restriction in paragraph 5 shall not apply to:
- (a) sphygmomanometers to be used:
- (i) in epidemiological studies which are ongoing on 10 October 2012;
- (ii) as reference standards in clinical validation studies of mercury-free sphygmomanometers;
- (b) thermometers exclusively intended to perform tests according to standards that require the use of mercury thermometers until 10 October 2017;
- (c) mercury triple point cells which are used for the calibration of platinum resistance thermometers.
- 7. The following mercury-using measuring devices intended for professional and industrial uses shall not be placed on the market after 10 April 2014:
- (a) mercury pycnometers;
- (b) mercury metering devices for determination of the softening point.
- 8. The restrictions in paragraphs 5 and 7 shall not apply to:
- (a) measuring devices more than 50 years old on 3 October 2007;
- (b) measuring devices which are to be displayed in public exhibitions for cultural and historical purposes.

19. Arsenic compounds

1. Shall not be placed on the market, or used, as substances or in mixtures where the substance or mixture is intended for use to prevent the fouling by micro-organisms, plants or animals of:



- the hulls of boats,
- cages, floats, nets and any other appliances or equipment used for fish or shellfish farming,
- any totally or partly submerged appliances or equipment.
- 2. Shall not be placed on the market, or used, as substances or in mixtures where the substance or mixture is intended for use in the treatment of industrial waters, irrespective of their use.
- 3. Shall not be used in the preservation of wood. Furthermore, wood so treated shall not be placed on the market.
- 4. By way of derogation from paragraph 3:
- (a) Relating to the substances and mixtures for the preservation of wood: these may only be used in industrial installations using vacuum or pressure to impregnate wood if they are solutions of inorganic compounds of the copper, chromium, arsenic (CCA) type C and if they are authorised in accordance with Article 5(1) of Directive 98/8/EC. Wood so treated shall not be placed on the market before fixation of the preservative is completed.
- (b) Wood treated with CCA solution in accordance with point (a) may be placed on the market for professional and industrial use provided that the structural integrity of the wood is required for human or livestock safety and skin contact by the general public during its service life is unlikely:
- as structural timber in public and agricultural buildings, office buildings, and industrial premises,
- in bridges and bridgework,
- as constructional timber in freshwater areas and brackish waters, for example jetties and bridges,
- as noise barriers.
- in avalanche control,
- in highway safety fencing and barriers,
- as debarked round conifer livestock fence posts,
- in earth retaining structures,
- as electric power transmission and telecommunications poles,
- as underground railway sleepers.
- (c) Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that all treated wood placed on the market is individually labelled 'For professional and industrial installation and use only, contains arsenic'. In addition, all wood placed on the market in packs shall also bear a label stating 'Wear gloves when handling this wood. Wear a dust mask and eye protection when cutting or otherwise crafting this wood. Waste from this wood shall be treated as hazardous by an authorised undertaking'.
- (d) Treated wood referred to under point (a) shall not be used:
- in residential or domestic constructions, whatever the purpose,



— in any application where there is a risk of rep	peated skin contact,
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- in marine waters,
- for agricultural purposes other than for livestock fence posts and structural uses in accordance with point (b),
- in any application where the treated wood may come into contact with intermediate or finished products intended for human and/or animal consumption.
- 5. Wood treated with arsenic compounds that was in use in the Community before 30 September 2007, or that was placed on the market in accordance with paragraph 4 may remain in place and continue to be used until it reaches the end of its service life.
- 6. Wood treated with CCA type C that was in use in the Community before 30 September 2007, or that was placed on the market in accordance with paragraph4:
- may be used or reused subject to the conditions pertaining to its use listed under points 4(b), (c) and (d),
- may be placed on the market subject to the conditions pertaining to its use listed under points 4(b), (c) and (d).
- 7. Member States may allow wood treated with other types of CCA solutions that was in use in the Community before 30 September 2007:
- to be used or reused subject to the conditions pertaining to its use listed under points 4 (b), (c) and (d),
- to be placed on the market subject to the conditions pertaining to its use listed under points 4(b), (c) and (d).

1. Shall not be placed on the market, or used, as substances or in mixtures where the substance or mixture is acting as biocide in free association paint.

- 2. Shall not be placed on the market, or used, as substances or in mixtures where the substance or mixture acts as biocide to prevent the fouling by micro-organisms, plants or animals of:
- (a) all craft irrespective of their length intended for use in marine, coastal, estuarine and inland waterways and lakes;
- (b) cages, floats, nets and any other appliances or equipment used for fish or shellfish farming;
- (c) any totally or partly submerged appliance or equipment.
- 3. Shall not be placed on the market, or used, as substances or in mixtures where the substance or mixture is intended for use in the treatment of industrial waters.
- 4. Tri-substituted organostannic compounds:
- (a) Tri-substituted organostannic compounds such as tributyltin (TBT) compounds and triphenyltin (TPT) compounds shall not be used after 1 July 2010 in articles where the concentration in the article, or part thereof, is greater than the equivalent of 0,1 % by weight of tin.
- (b) Articles not complying with point (a) shall not be placed on the market after 1 July 2010, except for articles that were already in use in the Community before that date.
- 5. Dibutyltin (DBT) compounds:

20. Organostannic

compounds



- (a) Dibutyltin (DBT) compounds shall not be used after 1 January 2012 in mixtures and articles for supply to the general public where the concentration in the mixture or the article, or part thereof, is greater than the equivalent of 0,1 % by weight of tin.
- (b) Articles and mixtures not complying with point (a) shall not be placed on the market after 1 January 2012, except for articles that were already in use in the Community before that date.
- (c) By way of derogation, points (a) and (b) shall not apply until 1 January 2015 to the following articles and mixtures for supply to the general public:
- one-component and two-component room temperature vulcanisation sealants (RTV-1 and RTV-2 sealants) and adhesives,
- paints and coatings containing DBT compounds as catalysts when applied on articles,
- soft polyvinyl chloride (PVC) profiles whether by themselves or coextruded with hard PVC.
- fabrics coated with PVC containing DBT compounds as stabilisers when intended for outdoor applications,
- outdoor rainwater pipes, gutters and fittings, as well as covering material for roofing and façades,
- (d) By way of derogation, points (a) and (b) shall not apply to materials and articles regulated under Regulation (EC) No 1935/2004.
- 6. Dioctyltin (DOT) compound:
- (a) Dioctyltin (DOT) compounds shall not be used after 1 January 2012 in the following articles for supply to, or use by, the general public, where the concentration in the article, or part thereof, is greater than the equivalent of 0,1 % by weight of tin:
- textile articles intended to come into contact with the skin,
- gloves,
- footwear or part of footwear intended to come into contact with the skin,
- wall and floor coverings,
- childcare articles,
- female hygiene products,
- nappies,
- two-component room temperature vulcanisationmoulding kits (RTV-2 moulding kits).
- (b) Articles not complying with point (a) shall not be placed on the market after 1 January 2012, except for articles that were already in use in the Community before that date.

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Di--oxo-di-n-butylstanniohyd roxyborane/Dibutyltin hydrogen borate C₈H₁₉BO₃Sn (DBB) CAS No 75113-37-0

Shall not be placed on the market, or used, as a substance, or in mixtures in a concentration equal to, or greater than 0,1 % by weight.

However, the first paragraph shall not apply to this substance (DBB) or mixtures containing it if these are intended solely for conversion into articles, among which this substance will no longer feature in a concentration equal to or greater than 0,1 %.



EC No 401-040-5	
	Shall not be placed on the market, or used,
22. Pentachlorophenol	— as a substance,
CAS No 87-86-5	— as a constituent in other substances, or in mixtures, in a concentration equal to or
EC No 201-778-6 and its	greater than 0,1 % by weight.
salts and esters	
	For the purpose of this entry, the codes and chapters indicated in square brackets are
23. Cadmium	the codes and chapters of the tariff and statistical nomenclature of Common Customs
CAS No 7440-43-9	Tariff as established by Council Regulation (EEC) No 2658/87
EC No 231-152-8	1. Shall not be used in mixtures and articles produced from the following synthetic
and its compounds	organic polymers (hereafter referred to as plastic material):
	— polymers or copolymers of vinyl chloride (PVC) [3904 10] [3904 21]
	— polyurethane (PUR) [3909 50]
	— low-density polyethylene (LDPE), with the exception of low-density polyethylene
	used for the production of colouredmasterbatch [3901 10]
	— cellulose acetate (CA) [3912 11]
	— cellulose acetate butyrate (CAB) [3912 11]
	— epoxy resins [3907 30]
	— melamine-formaldehyde (MF) resins [3909 20]
	— urea-formaldehyde (UF) resins [3909 10]
	— unsaturated polyesters (UP) [3907 91]
	— polyethylene terephthalate (PET) [3907 60]
	— polybutylene terephthalate (PBT)
	— transparent/general-purpose polystyrene [3903 11]
	— acrylonitrile methylmethacrylate (AMMA)
	— cross-linked polyethylene (VPE)
	— high-impact polystyrene
	— polypropylene (PP) [3902 10]
	Mixtures and articles produced from plastic material as listed above shall not be
	placed on the market if the concentration of cadmium (expressed as Cd metal) is
	equal to or greater than 0,01 % by weight of the plastic material.
	By way of derogation, the second subparagraph shall not apply to articles placed on
	the market before 10 December 2011.
	The first and second subparagraphs apply without prejudice to Council Directive
	94/62/EC and acts adopted on its basis.
	By 19 November 2012, in accordance with Article 69, the Commission shall ask the
	European Chemicals Agency to prepare a dossier conforming to the requirements of
	Annex XV in order to assess whether the use of cadmium and its compounds in
	plastic material, other than that listed in subparagraph 1, should be restricted.
	2. Shall not be used or placed on the market in paints with codes [3208] [3209] in a
	concentration (expressed as Cd metal) equal to or greater than 0,01 % by weight.



For paints with codes [3208] [3209] with a zinc content exceeding 10 % by weight of the paint, the concentration of cadmium (expressed as Cd metal) shall not be equal to or greater than 0,1 % by weight.

Painted articles shall not be placed on the market if the concentration of cadmium (expressed as Cd metal) is equal to or greater than 0,1 % by weight of the paint on the painted article.'

- 3. By way of derogation, paragraphs 1 and 2 shall not apply to articles coloured with mixtures containing cadmium for safety reasons.
- 4. By way of derogation, paragraph 1, second subparagraph shall not apply to:
- mixtures produced from PVC waste, hereinafter referred to as 'recovered PVC'
- mixtures and articles containing recovered PVC if their concentration of cadmium (expressed as Cd metal) does not exceed 0,1 % by weight of the plastic material in the following rigid PVC applications:

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- (a) profiles and rigid sheets for building applications;
- (b) doors, windows, shutters, walls, blinds, fences, and roof gutters;
- (c) decks and terraces;
- (d) cable ducts;
- (e) pipes for non-drinking water if the recovered PVC is used in the middle layer of a multilayer pipe and is entirely covered with a layer of newly produced PVC in compliance with paragraph 1 above.

Suppliers shall ensure, before the placing on the market of mixtures and articles containing recovered PVC for the first time, that these are visibly, legibly and indelibly

marked as follows: 'Contains recovered PVC' or with the following pictogram:

5. For the purpose of this entry, 'cadmium plating' means any deposit or coating of metallic cadmium on a metallic surface.

Shall not be used for cadmium plating metallic articles or components of the articles used in the following sectors/applications:

- (a) equipment and machinery for:
- food production [8210] [8417 20] [8419 81] [8421 11] [8421 22] [8422] [8435] [8437] [8438] [8476 11]
- agriculture [8419 31] [8424 81] [8432] [8433] [8434] [8436]
- cooling and freezing [8418]
- printing and book-binding [8440] [8442] [8443]
- (b) equipment and machinery for the production of:
- household goods [7321] [8421 12] [8450] [8509] [8516]
- furniture [8465] [8466] [9401] [9402] [9403] [9404]
- sanitary ware [7324]
- central heating and air conditioning plant [7322] [8403] [8404] [8415]

In any case, whatever their use or intended final purpose, the placing on the market of cadmium-plated articles or components of such articles used in the



sectors/applications listed in points (a) and (b) above and of articles manufactured in the sectors listed in point (b) above is prohibited.

- 6. The provisions referred to in paragraph 5 shall also be applicable to cadmium-plated articles or components of such articles when used in the sectors/applications listed in points (a) and (b) below and to articles manufactured in the sectors listed in (b) below:
- (a) equipment and machinery for the production of:
- paper and board [8419 32] [8439] [8441] textiles and clothing [8444] [8445] [8447] [8448] [8449] [8451] [8452]
- (b) equipment and machinery for the production of:
- industrial handling equipment and machinery [8425] [8426] [8427] [8428] [8429] [8430] [8431]
- road and agricultural vehicles [chapter 87]
- rolling stock [chapter 86]
- vessels [chapter 89]
- 7. However, the restrictions in paragraphs 5 and 6 shall not apply to:
- articles and components of the articles used in the aeronautical, aerospace, mining, offshore and nuclear sectors whose applications require high safety standards and in safety devices in road and agricultural vehicles, rolling stock and vessels,
- electrical contacts in any sector of use, where that is necessary to ensure the reliability required of the apparatus on which they are installed.
- 8. Shall not be used in brazing fillers in concentration equal to or greater than 0,01 % by weight.

Brazing fillers shall not be placed on the market if the concentration of cadmium (expressed as Cd metal) is equal to or greater than 0,01 % by weight.

For the purpose of this paragraph brazing shall mean a joining technique using alloys and undertaken at temperatures above 450 °C.

- 9. By way of derogation, paragraph 8 shall not apply to brazing fillers used in defence and aerospace applications and to brazing fillers used for safety reasons.
- 10. Shall not be used or placed on the market if the concentration is equal to or greater than 0,01 % by weight of the metal in:
- (i) metal beads and other metal components for jewellery making;
- (ii) metal parts of jewellery and imitation jewellery articles and hair accessories, including:
- bracelets, necklaces and rings,
- piercing jewellery,
- wrist-watches and wrist-wear,
- brooches and cufflinks.
- 11. By way of derogation, paragraph 10 shall not apply to articles placed on the market before 10 December 2011 and jewellery more than 50 years old on 10 December 2011.



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24. Monomethyl— tetrachlorodiphenyl methane Trade name: Ugilec 141 CAS No 76253-60-6	 Shall not be placed on the market, or used, as a substance or in mixtures. Articles containing the substance shall not be placed on the market. By way of derogation, paragraph 1 shall not apply: (a) in the case of plant and machinery already in service on 18 June 1994, until such plant and machinery is disposed of; (b) in the case of the maintenance of plant and machinery already in service within a Member State on 18 June 1994. For the purposes of point (a) Member States may, on grounds of human health protection and environmental protection, prohibit within their territory the use of such plant or machinery before it is disposed of.
25. Monomethyl-dichloro-diphen yl methane Trade name: Ugilec 121 Ugilec 21	Shall not be placed on the market, or used, as a substance or in mixtures. Articles containing the substance shall not be placed on the market.
26. Monomethyl-dibromo-diphen yl methane bromobenzylbromotoluene, mixture of isomers Trade name: DBBT CAS No 99688-47-8	Shall not be placed on the market, or used, as a substance or in mixtures. Articles containing the substance shall not be placed on the market.
27. Nickel CAS No 7440-02-0 EC No 231-111-4 and its compounds	 Shall not be used: (a) in any post assemblies which are inserted into pierced ears and other pierced parts of the human body unless the rate of nickel release from such post assemblies is less than 0,2 μg/cm2/week (migration limit); (b) in articles intended to come into direct and prolonged contact with the skin such as:



	3. The standards adopted by the European Committee for Standardisation (CEN) shall be used as the test methods for demonstrating the conformity of articles to paragraphs 1 and 2.
28. Substances which appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 classified as carcinogen category 1A or 1B (Table 3.1) or carcinogen category 1 or 2 (Table 3.2) and listed as follows:	
— Carcinogen category 1A	
(Table 3.1)/carcinogen category 1 (Table 3.2) listed in Appendix 1	Without prejudice to the other parts of this Annex the following shall apply to entries 28 to 30:
— Carcinogen category 1B	1. Shall not be placed on the market, or used,
(Table 3.1)/carcinogen category 2 (Table 3.2) listed in Appendix 2	 — as substances, — as constituents of other substances, or, — in mixtures, for supply to the general public when the individual concentration in the substance or
29. Substances which appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 classified as germ	mixture is equal to or greater than: — either the relevant specific concentration limit specified in Part 3 of Annex VI to Regulation (EC) No 1272/2008, or,
cell mutagen category 1A or 1B (Table 3.1) or mutagen category 1 or 2 (Table 3.2) and listed as follows:	— the relevant concentration specified in Directive 1999/45/EC where no specific concentration limit is set out in Part 3 of Annex VI to Regulation (EC) No 1272/2008. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of substances and mixtures, suppliers shall
Mutagen category 1A	ensure before the placing on the market that the packaging of such substances and mixtures is marked visibly, legibly and indelibly as follows:
(Table	'Restricted to professional users'. 2. By way of derogation, paragraph 1 shall not apply to:
3.1)/mutagen category 1 (Table 3.2) listed in Appendix 3	(a) medicinal or veterinary products as defined by Directive 2001/82/EC and Directive 2001/83/EC;
— Mutagen category 1B	(b) cosmetic products as defined by Directive 76/768/EEC;(c) the following fuels and oil products:
(Table 3.1)/mutagen category 2 (Table 3.2) listed in	 motor fuels which are covered by Directive 98/70/EC, mineral oil products intended for use as fuel in mobile or fixed combustion plants,
2 (1001c 3.2) listed III	and the production mended for use us fuel in mount of fixed composition plants,

— fuels sold in closed systems (e.g. liquid gas bottles);

Appendix 4



30.

Substances which appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 classified as toxic to reproduction category 1A or 1B (Table 3.1) or toxic to reproduction category 1 or 2 (Table 3.2) and listed as follows:

- Reproductive toxicant
- category 1A adverse effects on sexual function and fertility or on development (Table 3.1) or reproductive toxicant category 1 with R60 (May impair fertility) or R61 (May cause harm to the unborn child) (Table 3.2) listed in Appendix 5
- Reproductive toxicant

category 1B adverse effects on sexual function and fertility or on development (Table 3.1) or reproductive toxicant category 2 with R60 (May impair fertility) or R61 (May cause harm to the unborn child) (Table 3.2) listed in Appendix 6

- (d) artists' paints covered by Directive 1999/45/EC;
- (e) the substances listed in Appendix 11, column 1, for the applications or uses listed in Appendix 11, column 2. Where a date is specified in column 2 of Appendix 11, the derogation shall apply until the said date.



31.

- (a) Creosote; wash oil CAS No 8001-58-9 EC No 232-287-5
- (b) Creosote oil; wash oil CAS No 61789-28-4 EC No 263-047-8
- (c) Distillates (coal tar), naphthalene oils; naphthalene oil

CAS No 84650-04-4 EC No 283-484-8

(d) Creosote oil, acenaphthene fraction; wash oil

CAS No 90640-84-9 EC No 283-484-8EC No 292-605-3

- (e) Distillates (coal tar), upper; heavy anthracene oil CAS No 65996-91-0 EC No 266-026-1
- (f) Anthracene oil CAS No 90640-80-5 EC No 292-602-7
- (g) Tar acids, coal, crude; crude phenols

CAS No 65996-85-2

EC No 266-019-3

- (h) Creosote, wood CAS No 8021-39-4 EC No 232-419-1
- (i) Low temperature tar oil, alkaline; extract residues (coal), low temperature coal tar alkaline

CAS No 122384-78-5 EC No 310-191-5

- 1. Shall not be placed on the market, or used, as substances or in mixtures where the substance or mixture is intended for the treatment of wood. Furthermore, wood so treated shall not be placed on the market.
- 2. By way of derogation from paragraph 1:
- (a) The substances and mixtures may be used for wood treatment in industrial installations or by professionals covered by Community legislation on the protection of workers for in situ retreatment only if they contain:
- (i) benzo[a]pyrene at a concentration of less than 50 mg/kg (0,005 % by weight), and
- (ii) water extractable phenols at a concentration of less than 3 % by weight. Such substances and mixtures for use in wood treatment in industrial installations or by professionals:
- may be placed on the market only in packaging of a capacity equal to or greater than 20 litres.
- shall not be sold to consumers.

Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that the packaging of such substances and mixtures is visibly, legibly and indelibly marked as follows:

'For use in industrial installations or professional treatment only'.

- (b) Wood treated in industrial installations or by professionals according to subparagraph (a) which is placed on the market for the first time or retreated in situ may be used for professional and industrial use only, for example on railways, in electric power transmission and telecommunications, for fencing, for agricultural purposes (for example stakes for tree support) and in harbours and waterways.
- (c) The prohibition in paragraph 1 on the placing on the market shall not apply to wood which has been treated with substances listed in entry 31 (a) to (i) before 31 December 2002 and is placed on the second-hand market for re-use.
- 3. Treated wood referred to under paragraph 2(b) and (c) shall not be used:
- inside buildings, whatever their purpose,
- in toys,
- in playgrounds,
- in parks, gardens, and outdoor recreational and leisure facilities where there is a risk of frequent skin contact,
- in the manufacture of garden furniture such as picnic tables,
- for the manufacture and use and any re-treatment of:

— containers intended for growing purposes,

- packaging that may come into contact with raw materials, intermediate or finished products destined for human and/or animal consumption,
- other materials which may contaminate the articles mentioned above.



32. Chloroform CAS No 67-66-3 EC No 200-663-8

33. Carbon-

tetrachloridetetrachlorome-th

CAS No 56-23-5 EINECS No 200-262-8

34. 1,1,2-Trichloroethane CAS No 79-00-5

EC No 201-166-9

35. 1,1,2,2-Tetrachloroethan

CAS No 79-34-5

EC No 201-197-8

36. 1,1,1,2-Tetrachloroethan

CAS No 630-20-6

37. Pentachloroethane

CAS No 76-01-7

EC No 200-925-1

38. 1,1-Dichloroethene

CAS No 75-35-4

EC No 200-864-0

39. 1,1,1 Trichloroethane,

methyl

chloroform

CAS No 71-55-6

EINECS No 200-756-3

Without prejudice to the other parts of this Annex, the following shall apply to entries 32 to 38.

- 1. Shall not be placed on the market, or used,
- as substances,
- as constituents of other substances, or in mixtures in concentrations equal to or greater than 0,1 % by weight,

where the substance or mixture is intended for supply to the general public and/or is intended for diffusive applications such as in surface cleaning and cleaning of fabrics.

2. Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that the packaging of such substances and mixtures containing them in concentrations equal to or greater than 0,1 % by weight is visibly, legibly and indelibly marked as follows:

'For use in industrial installations only'.

By way of derogation this provision shall not apply to:

- (a) medicinal or veterinary products as defined by Directive 2001/82/EC and Directive 2001/83/EC;
- (b) cosmetic products as defined by Directive 76/768/EEC.



40. Substances classified as
flammable gases category 1
or 2, flammable liquids
categories 1, 2 or 3,
flammable solids category 1
or 2, substances and mixtures
which, in contact with water,
emit flammable gases,
category 1, 2 or 3, pyrophoric
liquids category 1 or
pyrophoric solids category 1,
regardless of whether they
appear in Part 3 of Annex
VI to Regulation (EC) No
1272/2008 or not.

- 1. Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following:
- metallic glitter intended mainly for decoration,
- artificial snow and frost,
- 'whoopee' cushions,
- silly string aerosols,
- imitation excrement,
- horns for parties,
- decorative flakes and foams,
- artificial cobwebs,
- stink bombs.
- 2. Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with:

'For professional users only'.

- 3. By way of derogation, paragraphs 1 and 2 shall not apply to the aerosol dispensers referred to Article 8 (1a) of Council Directive 75/324/EEC.
- 4. The aerosol dispensers referred to in paragraphs 1 and 2 shall not be placed on the market unless they conform to the requirements indicated.

41. Hexachloroethane CAS No 67-72-1 EC No 200-666-4

Shall not be placed on the market, or used, as substance or in mixtures, where the substance or mixture is intended for the manufacturing or processing of non-ferrous metals.

42. Alkanes, C10-C13, ehloro-(short-chain chlorinatedparaffins) (SCCPs)

EINECS No 287-476-5

Shall not be placed on the market for use as substances or as constituents of other substances or preparations in concentrations higher than 1 %:

- in metalworking;
- for fat liquoring of leather.
- 43. Azocolourants and Azodyes
- 1. Azodyes which, by reductive cleavage of one or more azo groups, may release one or more of the aromatic amines listed in Appendix 8, in detectable concentrations, i.e. above 30 mg/kg (0,003 % by weight) in the articles or in the dyed parts thereof, according to the testing methods listed in Appendix 10, shall not be used, in textile and leather articles which may come into direct and prolonged contact with the human skin or oral cavity, such as:
- clothing, bedding, towels, hairpieces, wigs, hats, nappies and other sanitary items,



	sleeping bags,
	— footwear, gloves, wristwatch straps, handbags, purses/wallets, briefcases, chair
	covers, purses worn round the neck,
	— textile or leather toys and toys which include textile or leather garments,
	— yarn and fabrics intended for use by the final consumer.
	2. Furthermore, the textile and leather articles referred to in paragraph 1 shall not be
	placed on the market unless they conform to the requirements set out in that
	paragraph.
	3. Azodyes, which are contained in Appendix 9, 'List of azodyes' shall not be
	placed on the market, or used, as substances, or in mixtures in concentrations greater
	than 0,1 % by weight, where the substance or the mixture is intended for colouring
	textile and leather articles.
	textile and leather articles.
44. Diphenylether,	1. Shall not be placed on the market or used as a substance or as a constituent of
pentabromo	preparations in concentrations higher than 0,1 % by mass.
derivative C12H5Br5O	
delivative C12H3D13O	2. Articles may not be placed on the market if they, or flame-retarded parts thereof,
	contain this substance in concentrations higher than 0,1 % by mass.
	1. Shall not be placed on the market, or used:
	— as a substance,
45. Diphenylether,	— as a constituent of other substances, or in mixtures, in concentrations greater than
octabromo derivative	0,1 % by weight.
$C_{12}H_2Br_8O$	2. Articles shall not be placed on the market if they, or flame-retardant parts thereof,
	contain this substance in concentrations greater than 0,1 % by weight.
	3. By way of derogation, paragraph 2 shall not apply:
	— to articles that were in use in the Community before 15 August 2004,
	— to electrical and electronic equipment within the scope of Directive 2002/95/EC.
	to electrical and electronic equipment within the scope of Birective 2002/75/EC.
	Shall not be placed on the market, or used, as substances or in mixtures in
	concentrations equal to or greater than 0,1 % by weight for the following purposes:
	(1) industrial and institutional cleaning except:
	— controlled closed dry cleaning systems where the washing liquid is recycled or
	incinerated,
	— cleaning systems with special treatment where the washing liquid is recycled or
	incinerated.
	(2) domestic cleaning;
46.	(3) textiles and leather processing except:
(a) Nonylphenol	— processing with no release into waste water,
C ₆ H4(OH)C ₉ H ₁₉	— systems with special treatment where the process water is pre-treated to remove
CAS 25154-52-3	the organic fraction completely prior to biological waste water treatment (degreasing
EC 246-672-0	
	of sheepskin);



(b) Nonylphenolethoxy-	
lates	

 $(C_2H_4O)_nC_{15}H_{24}O$

- (4) emulsifier in agricultural teat dips;
- (5) metal working except:

uses in controlled closed systems where the washing liquid is recycled or incinerated;

- (6) manufacturing of pulp and paper;
- (7) cosmetic products;
- (8) other personal care products except: spermicides:
- (9) co-formulants in pesticides and biocides. However national authorisations for pesticides or biocidal products containing nonylphenolethoxylates as co-formulant, granted before 17 July 2003, shall not be affected by this restriction until their date of expiry.

46a.Nonylphenol ethoxylates (NPE) (C2H4O)nC15H24O

1. Shall not be placed on the market after 3 February 2021 in textile articles which can reasonably be expected to be washed in water during their normal lifecycle, in concentrations equal to or greater than 0,01 % by weight of that textile article or of each part of the

textile article.

- 2. Paragraph 1 shall not apply to the placing on the market of secondhand textile articles or of new textile articles produced, without the use of NPE, exclusively from recycled textiles.
- 3. For the purposes of paragraphs 1 and 2, "textile article" means any unfinished, semi-finished or finished product which is composed of at least 80 % textile fibres by weight, or any other product that contains a part which is composed of at least 80 % textile fibres by

weight, including products such as clothing, accessories, interior textiles, fibres, yarn, fabrics and knitted panels.'

47. Chromium VI compounds

- 1. Cement and cement-containing mixtures shall not be placed on the market, or used, if they contain, when hydrated, more than 2 mg/kg (0,0002 %) soluble chromium VI of the total dry weight of the cement.
- 2. If reducing agents are used, then without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that the packaging of cement or cement-containing mixtures is visibly, legibly and indelibly marked with information on the packing date, as well as on the storage conditions and the storage period appropriate to maintaining the activity of the reducing agent and to keeping the content of soluble chromium VI below the limit indicated in paragraph 1.
- 3. By way of derogation, paragraphs 1 and 2 shall not apply to the placing on the market for, and use in, controlled closed and totally automated processes in which cement and cement-containing mixtures are handled solely by machines and in which there is no possibility of contact with the skin.
- 4. The standard adopted by the European Committee for Standardization (CEN) for



	testing the water-soluble chromium (VI) content of cement and cement-containing mixtures shall be used as the test method for demonstrating conformity with paragraph 1. 5. Leather articles coming into contact with the skin shall not be placed on the market where they contain chromium VI in concentrations equal to or greater than 3 mg/kg (0,0003 % by weight) of the total dry weight of the leather. 6. Articles containing leather parts coming into contact with the skin shall not be placed on the market where any of those leather parts contains chromium VI in concentrations equal to or greater than 3 mg/kg (0,0003 % by weight) of the total dry weight of that leather part. 7. Paragraphs 5 and 6 shall not apply to the placing on the market of second-hand articles which were in end-use in the Union before 1 May 2015.'
40. Т. 1	
48. Toluene	Shall not be placed on the market, or used, as a substance or in mixtures in a
CAS No 108-88-3	concentration equal to or greater than 0,1 % by weight where the substance or
EC No 203-625-9	mixture is used in adhesives or spray paints intended for supply to the general public.
49. Trichlorobenzene CAS No 120-82-1 EC No 204-428-0	Shall not be placed on the market, or used, as a substance or in mixtures in a concentration equal to or greater than 0,1 % by weight for any use except: — as an intermediate of synthesis, or, — as a process solvent in closed chemical applications for chlorination reactions, or, — in the manufacture of 1,3,5-triamino — 2,4,6-trinitrobenzene (TATB).
50. Polycyclic-aromatic hydrocarbons (PAH) (a) Benzo[a]pyrene (BaP) CAS No 50-32-8 (b) Benzo[e]pyrene (BeP) CAS No 192-97-2 (c) Benzo[a]anthracene (BaA) CAS No 56-55-3	1. From 1 January 2010, extender oils shall not be placed on the market, or used for the production of tyres or parts of tyres if they contain: — more than 1 mg/kg (0,0001 % by weight) BaP, or, — more than 10 mg/kg (0,001 % by weight) of the sum of all listed PAHs. These limits shall be regarded as kept, if the polycyclic aromatics (PCA) extract is less than 3 % by weight as measured by the Institute of Petroleum standard IP346: 1998 (Determination of PCA in unused lubricating base oils and asphaltene free petroleum fractions — Dimethyl sulphoxide extraction refractive index method), provided that compliance with the limit values of BaP and of the listed PAHs, as well as the correlation of the measured values with the PCA extract, is controlled by the manufacturer or importer every six months or after each major operational change, whichever is earlier. 2. Furthermore, tyres and treads for retreading manufactured after 1 January 2010 shall not be placed on the market if they contain extender oils exceeding the limits indicated in paragraph 1. These limits shall be regarded as kept, if the vulcanised rubber compounds do not
(d) Chrysen (CHR)	



CAS No 218-01-9

(e) Benzo[b]fluoranthene(BbFA)

CAS No 205-99-2

(f) Benzo[j]fluoranthene (BjFA)

CAS No 205-82-3

(g) Benzo[k]fluoranthene(BkFA)

CAS No 207-08-9

(h) Dibenzo[a,h]anthracene (DBAhA)

CAS No 53-70-3

exceed the limit of 0,35 % Bay protons as measured and calculated by ISO 21461 (Rubber vulcanised— Determination of aromaticity of oil in vulcanised rubber compounds).

- 3. By way of derogation, paragraph 2 shall not apply to retreaded tyres if their tread does not contain extender oils exceeding the limits referred to in paragraph 1.
- 4. For the purpose of this entry 'tyres' shall mean tyres for vehicles covered by:
- Directive 2007/46/EC of the European Parliament and of the Council of 5 September 2007 establishing a framework for the approval of motor vehicles and their trailers.
- Directive 2003/37/EC of the European Parliament and of the Council of 26 May 2003 on type-approval of agricultural or forestry tractors, their trailers and interchangeable towed machinery, together with their systems, components and separate technical units, and
- Directive 2002/24/EC of the European Parliament and of the Council of 18 March 2002 relating to the type-approval of two or three-wheel motor vehicles and repealing Council Directive 92/61/EEC.
- '5. Articles shall not be placed on the market for supply to the general public, if any of their rubber or plastic components that come into direct as well as prolonged or short-term repetitive contact with the human skin or the oral cavity, under normal or reasonably foreseeable conditions of use, contain more than 1 mg/kg (0,0001 % by weight of this component) of any of the listed PAHs.

Such articles include amongst others:

- sport equipment such as bicycles, golf clubs, racquets
- household utensils, trolleys, walking frames
- tools for domestic use
- clothing, footwear, gloves and sportswear
- watch-straps, wrist-bands, masks, head-bands
- 6. Toys, including activity toys, and childcare articles, shall not be placed on the market, if any of their rubber or plastic components that come into direct as well as prolonged or short-term repetitive contact with the human skin or the oral cavity, under

normal or reasonably foreseeable conditions of use, contain more than 0,5 mg/kg (0,00005 % by weight of this component) of any of the listed PAHs.

- 7. By way of derogation from paragraphs 5 and 6, these paragraphs shall not apply to articles placed on the market for the first time before 27 December 2015.
- 8. By 27 December 2017, the Commission shall review the limit values in paragraphs 5 and 6 in the light of new scientific information, including migration of PAHs from the articles referred to therein, and information on alternative raw materials and, if appropriate, modify these paragraphs accordingly.'
- 51. The following phthalates (or other CAS and EC numbers covering the
- 1. Shall not be used as substances or in mixtures, in concentrations greater than
- 0,1 % by weight of the plasticised material, in toys and childcare articles.
- 2. Toys and childcare articles containing these phthalates in a concentration greater



1	
substance)	٠
substance,	١.

(a) Bis (2-ethylhexyl) phthalate (DEHP)

CAS No 117-81-7

EC No 204-211-0

(b) Dibutyl phthalate (DBP) CAS No 84-74-2

EC No 201-557-4

(c) Benzyl butyl phthalate (BBP)

CAS No 85-68-7

EC No 201-622-7

- 52. The following phthalates (or other CAS- and EC numbers covering the substance):
- (a) Di- 'isononyl' phthalate

(DINP)

CAS No 28553-12-0 and 68515-48-0

EC No 249-079-5 and

271-090-9

(b) Di- 'isodecyl' phthalate

(DIDP)

CAS No 26761-40-0 and

68515-49-1

EC No 247-977-1 and

271-091-4

(c) Di-n-octyl phthalate

(DNOP)

CAS No 117-84-0

EC No 204-214-7

than 0,1 % by weight of the plasticised material shall not be placed on the market.

- 3. The Commission shall re-evaluate, by 16 January 2010, the measures provided for in relation to this entry in the light of new scientific information on such substances and their substitutes, and if justified, these measures shall be modified accordingly.
- 4. For the purpose of this entry 'childcare article' shall mean any product intended to facilitate sleep, relaxation, hygiene, the feeding of children or sucking on the part of children.

- 1. Shall not be used as substances or in mixtures, in concentrations greater than
- 0,1 % by weight of the plasticised material, in toys and childcare articles which can be placed in the mouth by children.
- 2. Such toys and childcare articles containing these phthalates in a concentration greater than 0,1 % by weight of the plasticised material shall not be placed on the market.
- 3. The Commission shall re-evaluate, by 16 January 2010, the measures provided for in relation to this entry in the light of new scientific information on such substances and their substitutes, and if justified, these measures shall be modified accordingly.
- 4. For the purpose of this entry 'childcare article' shall mean any product intended to facilitate sleep, relaxation, hygiene, the feeding of children or sucking on the part of children.

(53)

2-(2-methoxyethoxy)etha-nol

(DEGME)

CAS No : 111-77-3 EC No : 203-906-6 Shall not be placed on the market after [18 months after the entry into force of the Decision], for supply to the general public, as a constituent in paints and in paint strippers in concentrations equal to or higher than 0.1% by mass.



54. 2-(2-methoxyethoxy)etha	
nol (DEGME)	
CAS No 111-77-3	
EC No 203-906-6	

Shall not be placed on the market after 27 June 2010, for supply to the general public, as a constituent of paints, paint strippers, cleaning agents, self-shining emulsions or floor sealants in concentrations equal to or greater than 0,1 % by weight.

55. 2-(2-butoxyethoxy)ethan ol (DEGBE) CAS No 112-34-5 EC No 203-961-6

- 1. Shall not be placed on the market for the first time after 27 June 2010, for supply to the general public, as a constituent of spray paints or spray cleaners in aerosol dispensers in concentrations equal to or greater than 3 % by weight.
- 2. Spray paints and spray cleaners in aerosol dispensers containing DEGBE and not conforming to paragraph 1 shall not be placed on the market for supply to the general public after 27 December 2010.
- 3. Without prejudice to other Community legislation concerning the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that paints other than spray paints containing DEGBE in concentrations equal to or greater than 3 % by weight of that are placed on the market for supply to the general public are visibly, legibly and indelibly marked by 27 December 2010 as follows:

'Do not use in paint spraying equipment'.

- 56. Methylenediphenyldiisoc yanate (MDI)
 CAS No 26447-40-5
 EC No 247-714-0
 including the following
 specific isomers:
- (a) 4,4'
- -Methylenediphenyldiisocyan ate:

CAS No 101-68-8 EC No 202-966-0;

- (b) 2.4'
- -Methylenediphenyldiisocyan ate:

CAS No 5873-54-1 EC No 227-534-9;

- (c) 2,2'
- -Methylenediphenyldiisocyan ate:

CAS No 2536-05-2 EC No 219-799-4

- 1. Shall not be placed on the market after 27 December 2010, as a constituent of mixtures in concentrations equal to or greater than 0,1 % by weight of MDI for supply to the general public, unless suppliers shall ensure before the placing on the market that the packaging:
- (a) contains protective gloves which comply with the requirements of Council Directive 89/686/EEC;
- (b) is marked visibly, legibly and indelibly as follows, and without prejudice to other Community legislation concerning the classification, packaging and labelling of substances and mixtures:
- '— Persons already sensitised to diisocyanates may develop allergic reactions when using this product.
- Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product.
- This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.'
- 2. By way of derogation, paragraph 1(a) shall not apply to hot melt adhesives.



57.	Cyclohexane
CA	S No 110-82-7
EC	No 203-806-2

- 1. Shall not be placed on the market for the first time after 27 June 2010, for supply to the general public, as a constituent of neoprene-based contact adhesives in concentrations equal to or greater than 0,1 % by weight in package sizes greater than 350 g.
- 2. Neoprene-based contact adhesives containing cyclohexane and not conforming to paragraph 1 shall not be placed on the market for supply to the general public after 27 December 2010.
- 3. Without prejudice to other Community legislation concerning the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that neoprene-based contact adhesives containing cyclohexane in concentrations equal to or greater than 0,1 % by weight that are placed on the market for supply to the general public after 27 December 2010 are visibly, legibly and indelibly marked as follows:
 - '— This product is not to be used under conditions of poor ventilation.
- This product is not to be used for carpet laying.
- 58. Ammonium nitrate (AN) CAS No 6484-52-2 EC No 229-347-8
- 1. Shall not be placed on the market for the first time after 27 June 2010 as a substance, or in mixtures that contain more than 28 % by weight of nitrogen in relation to ammonium nitrate, for use as a solid fertiliser, straight or compound, unless the fertiliser complies with the technical provisions for ammonium nitrate fertilisers of high nitrogen content set out in Annex III to Regulation (EC) No 2003/2003 of the European Parliament and of the Council .
- 2. Shall not be placed on the market after 27 June 2010 as a substance, or in mixtures that contain 16 % or more by weight of nitrogen in relation to ammonium nitrate except for supply to:
- (a) downstream users and distributors, including natural or legal persons licensed or authorised in accordance with Council Directive 93/15/EEC;
- (b) farmers for use in agricultural activities, either full time or part time and not necessarily related to the size of the land area.

For the purposes of this subparagraph:

- (i) 'farmer' shall mean a natural or legal person, or a group of natural or legal persons, whatever legal status is granted to the group and its members by national law, whose holding is situated within Community territory, as referred to in Article 299 of the Treaty, and who exercises an agricultural activity;
- (ii) 'agricultural activity' shall mean the production, rearing or growing of agricultural products including harvesting, milking, breeding animals and keeping animals for farming purposes, or maintaining the land in good agricultural and environmental condition as established under Article 5 of Council Regulation (EC) No 1782/2003;
- (c) natural or legal persons engaged in professional activities such as horticulture, plant growing in greenhouses, maintenance of parks, gardens or sport pitches, forestry or other similar activities.
- 3. However, for the restrictions in paragraph 2, Member States may until 1 July



	2014, for socioeconomic reasons, apply a limit of up to 20 % by weight of nitrogen in
	relation to ammonium nitrate for substances and mixtures placed on the market
	within their territories. They shall inform the Commission and other Member States
	thereof.
	1. Paint strippers containing dichloromethane in a concentration equal to or greater
	than 0,1 % by weight shall not be:
	(a) placed on the market for the first time for supply to the general public or to
	professionals after 6 December 2010;
	(b) placed on the market for supply to the general public or to professionals after 6
	December 2011;
	(c) used by professionals after 6 June 2012.
59. Dichloromethane	For the purposes of this entry:
CAS No 75-09-2	(i) 'professional' means any natural or legal person, including workers and
EC No: 200-838-9	self-employed workers undertaking paint stripping in the course of their professional
LC 110. 200-030-7	activity outside an industrial installation;
	(ii) 'industrial installation' means a facility used for paint stripping activities.
	2. By way of derogation from paragraph 1, Member States may allow on their
	territories and for certain activities the use, by specifically trained professionals, of
	paint strippers containing dichloromethane and may allow the placing on the market
	of such paint strippers for supply to those professionals.
	Member States making use of this derogation shall define appropriate provisions for
	the protection of the health and safety of those professionals using paint strippers
	containing dichloromethane and shall inform the Commission thereof.
	Those provisions shall include a requirement that a professional shall hold a
	certificate that is accepted by the Member State in which that professional operates,
	or provide other documentary evidence to that effect, or be otherwise approved by
	that Member State, so as to demonstrate proper training and competence to safely use
	paint strippers containing dichloromethane.
	The Commission shall prepare a list of the Member States which have made use of
	the derogation in this paragraph and make it publicly available over the Internet.
	3. A professional benefiting from the derogation referred to in paragraph 2 shall
	operate only in Member States which have made use of that derogation. The training
	referred to in paragraph 2 shall cover as a minimum:
	(a) awareness, evaluation and management of risks to health, including information
	on existing substitutes or processes, which under their conditions of use are less
	hazardous to the health and safety of workers;
	(b) use of adequate ventilation;
	(c) use of appropriate personal protective equipment that complies with Directive
	89/686/EEC.

Employers and self-employed workers shall preferably replace dichloromethane with a chemical agent or process which, under its conditions of use, presents no risk, or a



	lower risk, to the health and safety of workers.
	Professional shall apply all relevant safety measures in practice, including the use of
	personal protective equipment.
	4. Without prejudice to other Community legislation on workers protection, paint
	strippers containing dichloromethane in concentrations equal to or greater than 0,1 %
	by weight may be used in industrial installations only if the following minimum
	conditions are met:
	(a) effective ventilation in all processing areas, in particular for the wet processing
	and the drying of stripped articles: local exhaust ventilation at strip tanks
	supplemented by forced ventilation in those areas, so as to minimise exposure and to
	ensure compliance, where technically feasible, with relevant occupational exposure
	limits;
	(b) measures to minimise evaporation from strip tanks comprising: lids for covering
	strip tanks except during loading and unloading; suitable loading and unloading
	arrangements for strip tanks; and wash tanks with water or brine to remove excess
	solvent after unloading;
	(c) measures for the safe handling of dichloromethane in strip tanks comprising:
	pumps and pipework for transferring paint stripper to and from strip tanks; and
	suitable arrangements for safe cleaning of tanks and removal of sludge;
	(d) personal protective equipment that complies with Directive 89/686/EEC
	comprising: suitable protective gloves, safety goggles and protective clothing; and
	appropriate respiratory protective equipment where compliance with relevant
	occupational exposure limits cannot be otherwise achieved;
	(e) adequate information, instruction and training for operators in the use of such equipment.
	5. Without prejudice to other Community provisions concerning the classification,
	labelling and packaging of substances and mixtures, by 6 December 2011 paint
	strippers containing dichloromethane in a concentration equal to or greater than
	0,1 % by weight shall be visibly, legibly and indelibly marked as follows:
	'Restricted to industrial use and to professionals approved in certain EU Member
	States — verify where use is allowed.'
60. Acrylamide	Shall not be placed on the market or used as a substance or constituent of mixtures in
CAS No 79-06-1	a concentration, equal to or greater than 0,1 % by weight for grouting applications
	after 5 November 2012.
61. Dimethylfumarate	Shall not be used in articles or any parts thereof in concentrations greater than
(DMF)	0,1 mg/kg. Articles or any parts thereof containing DMF in concentrations greater
CAS No 624-49-7	than 0,1 mg/kg shall not be placed on the market.
EC 210-849-0	man 0,1 mg/kg shan not be placed on the market.



'62. (a) Phenylmercury

EC No: 200-532-5

acetate

CAS No: 62-38-4 (b) Phenylmercury propionate EC No: 203-094-3 CAS No: 103-27-5 (c) Phenylmercury

2-ethylhexanoate EC No: 236-326-7

CAS No: 13302-00-6 (d) Phenylmercury octanoate EC

No: -

CAS No: 13864-38-5 (e) Phenylmercury neodecanoate

EC No: 247-783-7 CAS No: 26545-49-3 1. Shall not be manufactured, placed on the market or used as substances or in mixtures after 10 October 2017 if the concentration of mercury in the mixtures is equal to or greater than 0,01 % by weight. 2. Articles or any parts thereof containing one or more of these substances shall not be placed on the market after 10 October 2017 if the concentration of mercury in the articles or any part thereof is equal to or greater than 0,01 % by weight.'

63. Lead CAS No 7439-92-1 EC No 231-100-4 and its compounds

- 1. Shall not be placed on the market or used in any individual part of jewellery articles if the concentration of lead (expressed as metal) in such a part is equal to or greater than 0,05 % by weight.
- 2. For the purposes of paragraph 1:
- (i) 'jewellery articles' shall include jewellery and imitation jewellery articles and hair accessories, including:
- (a) bracelets, necklaces and rings;
- (b) piercing jewellery;
- (c) wrist watches and wrist-wear;
- (d) brooches and cufflinks;
- (ii) 'any individual part' shall include the materials from which the jewellery is made, as well as the individual components of the jewellery articles.
- 3. Paragraph 1 shall also apply to individual parts when placed on the market or used for jewellery-making.
- 4. By way of derogation, paragraph 1 shall not apply to:
- (a) crystal glass as defined in Annex I (categories 1, 2, 3 and 4) to Council Directive 69/493/EEC;
- (b) internal components of watch timepieces inaccessible to consumers;
- (c) non-synthetic or reconstructed precious and semiprecious stones (CN code 7103, as established by Regulation (EEC) No 2658/87), unless they have been treated with lead or its compounds or mixtures containing these substances;
- (d) enamels, defined as vitrifiable mixtures resulting from the fusion, vitrification or sintering of minerals melted at a temperature of at least 500 °C.
- 5. By way of derogation, paragraph 1 shall not apply to jewellery articles placed on the market for the first time before 9 October 2013 and jewellery articles produced before 10 December 1961.



- 6. By 9 October 2017, the Commission shall re-evaluate this entry in the light of new scientific information, including the availability of alternatives and the migration of lead from the articles referred to in paragraph 1 and, if appropriate, modify this entry accordingly.
- By 9 October 2017, the Commission shall re-evaluate paragraphs 1 to 5 of this entry in the light of new scientific information, including the availability of alternatives and the migration of lead from the articles referred to in paragraph 1 and, if appropriate, modify this entry accordingly.'
- 7. Shall not be placed on the market or used in articles supplied to the general public, if the concentration of lead (expressed as metal) in those articles or accessible parts thereof is equal to or greater than 0,05 % by weight, and those articles or accessible parts thereof may, during normal or reasonably foreseeable conditions of use, be placed in the mouth by children.

That limit shall not apply where it can be demonstrated that the rate of lead release from such an article or any such accessible part of an article, whether coated or uncoated, does not exceed 0,05 μ g/cm2 per hour (equivalent to 0,05 μ g/g/h), and, for coated articles, that the coating is sufficient to ensure that this release rate is not exceeded for a period of at least two years of normal or reasonably foreseeable conditions of use of the article.

For the purposes of this paragraph, it is considered that an article or accessible part of an article may be placed in the mouth by children if it is smaller than 5 cm in one dimension or has a detachable or protruding part of that size.

- 8.By way of derogation, paragraph 7 shall not apply to:
- (a) jewellery articles covered by paragraph 1;
- (b)crystal glass as defined in Annex I (categories 1, 2, 3 and 4) to Directive 69/493/EEC;
- (c)non-synthetic or reconstructed precious and semi-precious stones (CN code 7103 as established by Regulation (EEC) No 2658/87) unless they have been treated with lead or its compounds or mixtures containing these substances;
- (d)enamels, defined as vitrifiable mixtures resulting from the fusion, vitrification or sintering of mineral melted at a temperature of at least 500 °C;
- (e)keys and locks, including padlocks;
- (f)musical instruments;
- (g)articles and parts of articles comprising brass alloys, if the concentration of lead (expressed as metal) in the brass alloy does not exceed 0.5 % by weight;
- (h)the tips of writing instruments;
- (i)religious articles;
- (i)portable zinc-carbon batteries and button cell batteries;
- (k)articles within the scope of:
- (i)Directive 94/62/EC;
- (ii)Regulation (EC) No 1935/2004;
- (iii)Directive 2009/48/EC of the European Parliament and of the Council (1);



	(iv)Directive 2011/65/EU of the European Parliament and of the Council (2) 9.By 1 July 2019, the Commission shall re-evaluate paragraphs 7 and 8(e), (f), (i) and (j) of this entry in the light of new scientific information, including the availability of alternatives and the migration of lead from the articles referred to in paragraph 7, including the requirement on coating integrity, and, if appropriate, modify this entry accordingly.
	10.By way of derogation paragraph 7 shall not apply to articles placed on the market for the first time before 1 June 2016.
64. 1,4- two chlorobenzene	Should not be put on the market or used as a substance oras a component in the market in a mixture of use or be used for air fresheners or deodorant in the toilet, home, office orother indoor public places, when its concentration is greater than or equal to 1% (w/w).
65. Inorganic ammonium salts	1. Shall not be placed on the market, or used, in cellulose insulation mixtures or cellulose insulation articles after 14 July 2018 unless the emission of ammonia from those mixtures or articles results in a concentration of less than 3 ppm by volume (2,12 mg/m3) under the test conditions specified in paragraph 4. A supplier of a cellulose insulation mixture containing inorganic ammonium salts shall inform the recipient or consumer of the maximum permissible loading rate of the cellulose insulation mixture, expressed in thickness and density. A downstream user of a cellulose insulation mixture containing inorganic ammonium salts shall ensure that the maximum permissible loading rate communicated by the supplier is not exceeded. 2. By way of derogation, paragraph 1 shall not apply to placing on the market of cellulose insulation mixtures intended to be used solely for the production of cellulose insulation articles, or to the use of those mixtures in the production of cellulose insulation articles. 3. In the case of a Member State that, on 14 July 2016, has national provisional measures in place that have been authorised by the Commission pursuant to Article 129(2)(a), the provisions of paragraphs 1 and 2 shall apply from that date. 4. Compliance with the emission limit specified in the first subparagraph of paragraph 1 shall be demonstrated in accordance with Technical Specification CEN/TS 16516, adapted as follows: (a) the duration of the test shall be at least 14 days instead of 28 days; (b) the ammonia gas emission shall be measured at least once per day throughout the test; (c) the emission limit shall not be reached or exceeded in any measurement taken during the test; (d) the relative humidity shall be 90 % instead of 50 %; (e) an appropriate method to measure the ammonia gas emission shall be
	used; (f) the loading rate, expressed in thickness and density, shall be recorded during the sampling of the cellulose insulation mixtures or articles to be tested.'



66. Bisphenol A	Shall not be placed on the market in thermal paper in a concentration equal to or
CAS No 80-05-7;	greater than 0,02 % by weight after 2 January 2020.
EC No 201-245-8	
67.	Shall not be manufactured or placed on the market as a substance on its own after 2
Bis(pentabromophenyl)ether	March 2019.
(decabromodiphenyl ether;	2. Shall not be used in the production of, or placed on the market in:
decaBDE)	(a) another substance, as a constituent;
	(b) a mixture;
CAS No 1163-19-5	(c) an article, or any part thereof, in a concentration equal to or greater than 0,1 % by
EC No 214-604-9	weight, after 2 March 2019.
	3. Paragraphs 1 and 2 shall not apply to a substance, constituent of another substance or
	mixture that is to be used, or is used:
	(a) in the production of an aircraft before 2 March 2027.
	(b) in the production of spare parts for either of the following:
	(i) an aircraft produced before 2 March 2027;
	(ii) motor vehicles within the scope of Directive 2007/46/EC, agricultural and forestry
	vehicles within the scope of Regulation (EU) No 167/2013 of the European Parliament and
	of the Council (*1) or machinery within the scope of Directive 2006/42/EC of the European
	Parliament and of the Council (*2), produced before 2 March 2019.
	4. Subparagraph 2(c) shall not apply to any of the following:
	(a) articles placed on the market before 2 March 2019;
	(b) aircraft produced in accordance with subparagraph 3(a);
	(c) spare parts of aircraft, vehicles or machines produced in accordance with subparagraph
	3(b);
	(d) electrical and electronic equipment within the scope of Directive 2011/65/EU.
	5. For the purposes of this entry 'aircraft' means one of the following:
	(a) a civil aircraft produced in accordance with a type certificate issued under Regulation
	(EU) No 216/2008 of the European Parliament and of the Council (*3) or with a design
	approval issued under the national regulations of a contracting State of the International
	Civil Aviation Organisation (ICAO), or for which a certificate of airworthiness has been
	issued by an ICAO contracting State under Annex 8 to the Convention on International Civil
	Aviation;
	(b) a military aircraft.
68.Perfluorooctanoic acid	1.Shall not be manufactured, or placed on the market as substances on their own from 4
(PFOA)	July 2020.
CAS No 335-67-1	2.Shall not, from 4 July 2020, be used in the production of, or placed on the market in:
EC No 206-397-9	(a)another substance, as a constituent;
	(b)a mixture;
and its salts.	(c)an article,
Any related substance	in a concentration equal to or above 25 ppb of PFOA including its salts or 1 000 ppb of one
(including its salts and	or a combination of PFOA-related substances.
polymers) having a linear or	3.Points 1 and 2 shall apply from:



branched perfluoroheptyl group with the formula C7F15- directly attached to another carbon atom, as one of the structural elements.

Any related substance
(including its salts and
polymers) having a linear or
branched perfluorooctyl group
with the formula C8F17- as one
of the structural elements.
The following substances are
excluded from this designation:

- C8F17-X, where X = F, Cl, Br. - C8F17-C(=O)OH, C8F17-C(=O)O-X' or C8F17-CF2-X' (where X' = any group, including salts). (a)4 July 2022 to:

(i)equipment used to manufacture semi-conductors;

(ii)latex printing inks.

(b)4 July 2023 to:

(i)textiles for the protection of workers from risks to their health and safety;

(ii)membranes intended for use in medical textiles, filtration in water treatment, production processes and effluent treatment;

(iii)plasma nano-coatings.

(c)4 July 2032 to medical devices other than implantable medical devices within the scope of Directive 93/42/EEC.

4. Points 1 and 2 shall not apply to any of the following:

(a)perfluorooctane sulfonic acid and its derivatives, which are listed in Part A of Annex I to Regulation (EC) No 850/2004;

(b)the manufacture of a substance where this occurs as an unavoidable by-product of the manufacture of fluorochemicals with a carbon chain equal to or shorter than 6 atoms;

(c)a substance that is to be used, or is used as a transported isolated intermediate,

provided that the conditions in points (a) to (f) of Article 18(4) of this Regulation are met;

(d)a substance, constituent of another substance or mixture that is to be used, or is used:

(i)in the production of implantable medical devices within the scope of Directive 93/42/EEC;

(ii)in photographic coatings applied to films, papers or printing plates;

(iii)in photo-lithography processes for semiconductors or in etching processes for compound semiconductors;

(e)concentrated fire-fighting foam mixtures that were placed on the market before 4 July 2020 and are to be used, or are used in the production of other fire-fighting foam mixtures.

5. Point 2(b) shall not apply to fire-fighting foam mixtures which were:

(a)placed on the market before 4 July 2020; or

(b)produced in accordance with point 4(e), provided that, where they are used for training purposes, emissions to the environment are minimised and effluents collected are safely disposed of.

6.Point 2(c) shall not apply to:

(a)articles placed on the market before 4 July 2020;

(b)implantable medical devices produced in accordance with point 4(d)(i);

(c)articles coated with the photographic coatings referred to in point 4(d)(ii);

(d)semiconductors or compound semiconductors referred to in point 4(d)(iii).'

69.

Methanol

CAS No 67-56-1

EC No 200-659-6

Shall not be placed on the market to the general public after 9 May 2018 in wind- screen washing or defrosting fluids, in a concentration equal to or greater than 0,6 % by weight.'

70.

Octamethylcyclotetrasiloxane (D4);

Decamethylcyclopentasiloxane

1. Shall not be placed on the market in wash-off cosmetic products in a concentration equal to or greater than 0,1 % by weight of either substance, after 31 January 2020.

2. For the purposes of this entry, "wash-off cosmetic products" means cosmetic products



(D5)

as defined in Article 2(1)(a) of Regulation (EC) No 1223/2009 that, under normal conditions of use, are washed off with water after application.

71

1-methyl-2-pyrrolidone (NMP) CAS No 872-50-4 EC No 212-828-1 Shall not be placed on the market as a substance on its own or in mixtures in a concentration equal to or greater than 0,3 % after 9 May 2020 unless manu- facturers, importers and downstream users have included in the relevant chemi- cal safety reports and safety data sheets, Derived No-Effect Levels (DNELs) relating to exposure of workers of 14,4 mg/m3 for exposure by inhalation and 4,8 mg/kg/day for dermal exposure. Shall not be manufactured, or used, as a substance on its own or in mixtures in a concentration equal to or greater than 0,3 % after 9 May 2020 unless manufacturers and downstream users take the appropriate risk management measures and provide the appropriate operational conditions to ensure that ex- posure of workers is below the DNELs specified in paragraph 1.

By way of derogation from paragraphs 1 and 2, the obligations laid down therein shall apply

By way of derogation from paragraphs 1 and 2, the obligations laid down therein shall apply from 9 May 2024 in relation to placing on the market for use, or use, as a solvent or reactant in the process of coating wires.'

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