

Prohibited list

Epiroc is committed to provide a clean, safe and healthy environment for all employees. Use of listed substances is prohibited in products and internal and outsourced processes.



Scope

The Prohibited list provides information about Epiroc's prohibitions on the use of listed substances in products and processes. All substances included in the Epiroc Prohibited list are prohibited to be used in any article delivered to Epiroc if not exclusively exempted. Regardless if the scope of the legal reference is limited to a product type or a region Epiroc has decided that all listed substances are prohibited in all products delivered to and sold by the Group unless otherwise clearly exempted in the list. All Epiroc units as well as business partners, including suppliers, contractors, subcontractors, joint venture partners, and agents must comply with these prohibitions. Compliance with the Epiroc Prohibited list is part of the 10-Criteria letter for suppliers.

If national rules are more restrictive in the individual case such national rules must be followed.

Requirements

A prohibition may cover a single substance, a family or a group of substances. In the list the word "several" indicates that there are more substances that are prohibited within the entry.

All intended use of any substance, family or group of substances listed in Annex A is prohibited unless an exemption is given in the Prohibited list. A short version of the Prohibited list is shown in Annex A, not displaying all individual substances included in a family or group of substances. All individual substances, including CAS-nr, family and/or group and legal references is found in the separate document "**Epiroc Prohibited and Declarable list – full version**".

Where threshold values are given, the use of the substances above this threshold is prohibited. Substances that will soon be included in the Epiroc Prohibited list are listed in the Phase-Out list in Annex B. Clarifications of the legal references are given in Annex C.

The prohibition does not apply for substances purchased to be handled in small quantities by qualified staff at laboratories in research and development.

Radioactive substances (including scrap metal contaminants)

Epiroc Group does not accept radiating materials, such as Cobalt 60. Materials must not be radiating, not contain any radiating sources, irrespective if they are encapsulated or not, and not otherwise be contaminated by radiating material.

Radiating materials may be used in applications where they are used intentionally, for example in measuring equipment, and then only to the extent required to achieve the intended purpose.

Changes from previous version

Text clarifying that any item containing lead, cadmium or hexavalent chromium compound (concentration > 0.1%) that is included in the EU Candidate list must be declared even if the use is exempted.

¹ The Prohibited substance may not occur in concentrations higher than 0.1 per cent by mass in any article or ingredient included in a product delivered to or sold by Epiroc unless stricter legal requirements apply.

Annex A – Substances included in Prohibited list

Name (substance, family or group)	CAS no. ²	Examples of known uses	Exempted uses	Concentration limit	Legal reference
4-Aminobiphenyl and its salts	Several	Impurity in dye. Antioxidant in lubricants, rubber/latex and plastics	-	Maximum concentration of 0.1% refers to any article or ingredient included in a product.	Reach Annex XVII Reach Candidate list (individual substances marked in extended list)
Arsenic and arsenic compounds, all	Several	Paints, smelted materials, biocides (including wood treatment), glasses, metal finishes, electronics	Prohibited for use in treatment of industrial waters and use of wood treated by arsenic containing mixtures. All other uses Restricted and declarable	Maximum concentration of 0.1% refers to any article or ingredient included in a product.	Reach Annex XVII Reach Candidate list (individual substances marked in extended list) Reach Authorization list (individual substances marked in extended list)
Asbestos fibers, all	Several	Insulation material, friction pads, gaskets, construction material	-	Maximum concentration of 0.1% refers to any article or ingredient included in a product.	Reach Annex XVII
Azocolourants and Azodyes, selected	Several	Dyes for textiles	-	Maximum concentration of 0.1% refers to any article or ingredient included in a product.	Reach Annex XVII
Benzene	71-43-2	Contaminant in chemicals, e.g. adhesives, paints etc. Fuels	The prohibition does not include benzene in motor fuel	Maximum concentration of 0.1% refers to any article or ingredient included in a product.	Reach Annex XVII
Benzidine and its salts, all	Several	Impurity in dye: Antioxidant in lubricants, rubber/latex and plastics	-	Maximum concentration of 0.1% refers to any article or ingredient included in a product	Reach Annex XVII Reach Candidate list (individual substances marked in extended list)
Brominated flame retardants • Hexabromocyclododecane (HBCDD),all • Polybrominated biphenyls (PBBs), all • Polybrominated diphenyl ethers (PBDEs), all	Several	Flame retardant in electric and electronic equipment, plastics and textiles	-	In EEE the maximum concentration of PBBs and PBDEs is 0.1 % by weight in homogeneous materials. For non-EEE products the maximum concentration of 0.1% refers to any article included in a product	RoHS Reach Annex XVII Reach Candidate list (individual substances marked in extended list) Reach Authorization list (individual substances marked in extended list) Stockholm convention (POP)
Cadmium and cadmium compounds, all	Several	Anti-corrosion surface treatment of metals Plating Stabilizer in polymers Pigment in paint and plastics Ni/Cd batteries and accumulators	The prohibition does not cover use in electrical contacts Note! Content of any cadmium compound included in Declarable list must be declared even if the use is exempted Prohibited list	In EEE the maximum concentration of 0.01% by weight is in homogeneous materials. For non-EEE products the maximum concentration of 0.01% refers to any article included in a product Maximum concentration in batteries of 0.002% cadmium by weight of battery.	RoHS Reach Annex XVII Battery directive Reach Candidate list (individual substances marked in extended list)
Chlorinated and brominated dibenzo-p-dioxines or dibenzofuranes, all	Several	By-product from industrial processes	-	Maximum concentration of 0.1% refers to any article or ingredient included in a product.	Stockholm Convention (POP)
Chromium, hexavalent (CrVI) compounds, all	Several	Electrical and electronic equipment (e.g. catalysts, plating, surface treatment) Surface treatment Metal finishing Conversions coatings Pigment (paint, dye etc.)	The prohibition does not cover use for anti-corrosion of carbon steel for cooling systems in absorption refrigerators Note! Content of any hexavalent chromium-compound included in Declarable list must be declared even if the use is exempted Prohibited list	In EEE the maximum concentration of 0.1% by weight is in homogeneous materials. For non-EEE products the maximum concentration of 0.1% refers to any article included in a product	RoHS Reach Candidate list (individual substances marked in extended list) Reach Authorization list (individual substances marked in extended list)
1,1-Dichloroethene	75-35-4	Plastic materials (residues from production) Degreasing agent	-	Maximum concentration of 0.1% refers to any article or ingredient included in a product.	Reach Annex XVII
Dichloromethane (Methylene chloride)	75-09-2	Solvent in paint-strippers and removers	-	Maximum concentration of 0.1% refers to any article or ingredient included in a product.	Reach Annex XVII
Dimethylfumarate	624-49-7	Prevent mold during transport and storage	-	Maximum concentration of 0.1% refers to any article or ingredient included in a product.	Reach Annex XVII

²CAS is the abbreviation for Chemical Abstract Service registry number. This is an international numeric identifier which designates only one chemical substance

³EEE: abbreviation for electric and electronic equipment

⁴Homogenous material means a material that can not be mechanically disjointed into different materials, such as: unscrewing, cutting, crushing, grinding and abrasive processes.

Name (substance, family or group)	CAS no. ²	Examples of known uses	Exempted uses	Concentration limit	Legal reference
Diorganotin compounds, all	Several	Stabilizer for PVC; Biocide	Prohibited for use as biocide all other uses are Restricted and declarable	Maximum concentration of 0,1 % refers to any article or ingredient included in a product	Reach Annex XVII Reach Candidate list (individual substances marked in extended list)
Fluorinated greenhouse gases, selected • Hydrofluorocarbons (HFCs), all • Perfluorocarbons (PFCs), all • Sulphur hexafluoride	Several Several 2551-62-4	Refrigerant applications	Substances with a global warming potential (GWP) above 2500 are Prohibited. Substances with a GWP below 2500 are Restricted and declarable	Maximum concentration of 0,1 % refers to any article or ingredient included in a product.	Kyoto Protocol (GWP for individual substances given in extended list)
Halogenated diphenylmethanes, selected • Monomethyldibromodiphenylmethane (DBBT) • Monomethyldichlorodiphenylmethane (Ugilec 121) • Monomethyltetrachlorodiphenylmethane (Ugilec 141)	99688-47-8 81161-70-8 76253-60-6	Residues and decomposition products in production of polymers	-	Maximum concentration of 0,1 % refers to any article or ingredient included in a product.	Reach Annex XVII
Lead and lead compounds, all	Several	Electrical and electronic equipment (e.g. free-machining alloy, free-cutting steels, optical materials, solder, curing agents, ferroelectrics) Cables, Stabilizer in plastic Metal alloy, Plating, Batteries, Pigment in paint and plastic	The prohibition does not include the use in bearing shells and bushes, high melting temperature solders, solders for servers and network equipment or electronic ceramic parts. Note! Content of lead or other lead compound included in Declarable list must be declared even if the use is exempted Prohibited list	In EEE maximum concentration of 0,1 % by weight is in homogeneous materials. For non-EEE products the maximum concentration of 0,1 % refers to any article included in a product. Steel alloy may contain up to 0,35% lead. Aluminum alloy may contain up to 0,4 % lead. Copper alloy may contain up to 4% lead.	RoHS Reach Annex XVII (individual substances marked in extended list) Reach Candidate list (individual substances marked in extended list) Reach Authorization list (individual substances marked in extended list)
Mercury and mercury compounds, all	Several	Electrical and electronic equipment (e.g. contact point material, switches, anti-corrosion) Instrumentation Lightening equipment Batteries/accumulators (e.g. silver-oxide button cells, alkaline batteries, zinc carbon batteries)	Use in some lamps for special purposes are exempted (2011/65/EU)	In EEE maximum concentration of 0,1 % by weight is in homogeneous materials. Batteries may contain no more than 0,0005% mercury by weight For non-EEE products the maximum concentration of 0,1 % refers to any article included in a product	RoHS Battery directive
2-Naphtylamine and its salts	Several	Impurity in dye; Antioxidant in lubricants, rubber/latex and plastics	-	Maximum concentration of 0,1 % refers to any article or ingredient included in a product.	Reach Annex XVII
4-Nitrobiphenyl and its salts	92-93-3	Impurity in dye; Antioxidant in lubricants, rubber/latex and plastics	-	Maximum concentration of 0,1 % refers to any article or ingredient included in a product.	Reach Annex XVII
Nonylphenol and nonylphenoethoxylates, all	Several	Residues on metals, leather and textiles from their processing. Surfactants in cleaning agents, metal-working fluids, lubricants etc., Hardener in paint and plastics	-	Maximum concentration of 0,1 % refers to any article or ingredient included in a product.	Reach Annex XVII Reach Candidate list (individual substances marked in extended list)
Ozone depleting substances, all • Chlorofluorocarbons (CFCs), all • Halons, all • Hydrobromofluorocarbons (HBFCs), all • Hydrochlorofluorocarbons (HCFCs), all • Methylbromide • Trichloroethane (all isomers)	Several	Refrigerant, foaming agent, extinguishant, solvent, cleaner Paint, aerosol propellant, adhesives	-	Maximum concentration of 0,1 % refers to any article or ingredient included in a product.	Montreal Protocol

Name (substance, family or group)	CAS no. ²	Examples of known uses	Exempted uses	Concentration limit	Legal reference
PAHs (Polycyclic aromatic hydrocarbons), selected <ul style="list-style-type: none"> • Benzolalpyrene (BaP) • Benzolelpyrene (BeP) • Benzlelecephenanthrylene (BaA) • Chrysen (CHR) • Benolblfluoranthene (BbFA) • Benojjfluoranthene (BjFA) • Benoklfluoranthene (BkFA) • Dibenzola.hlanthracene (DBAhA) 	50-32-8 192-97-2 56-55-3 218-01-9 205-99-2 205-82-3 207-08-9 53-70-3	Extender oils in tyres, base oils, rubber	-	Extender oils used may not contain more than 1 ppm Benso(a) pyren (BaP) nor may the sum of the 8 listed PAHs exceed 10 ppm.	Reach Annex XVII Reach Candidate list (individual substances marked in extended list)
Pentachloroethane	76-01-7	Solvent for oil and grease, metal cleaning	-	Maximum concentration of 0,1% refers to any article or ingredient included in a product.	Reach Annex XVII
Pentachlorophenol (PCP) and its salt and esters, all	87-86-5	Wood preservative, salts used in leather treatment, stabilizer for latex	-	Maximum concentration of 0,1% refers to any article or ingredient included in a product.	Reach Annex XVII
Perfluorooctane sulfonates, PFOS, all	Several	Surface coating, surfactants, ingredient in the textile protective treatment	-	Maximum concentration of 0,1% refers to any article or ingredient included in a product.	Stockholm Convention (POP)
Pesticides (Biocides and Plant protection products (PPP)), selected <ul style="list-style-type: none"> • Aldrin • Chlordane • Chlordecone • Dieldrin • Endosulfan • Endosulfan • α Endosulfan • β Endrin • Heptachlor • Hexachlorobenzene • α HCH • β HCH • Lindane • Mirex • Pentachlorobenzene • Toxaphen 	309-00-2 57-74-9 143-50-0 60-57-1 115-29-7 959-98-9 33213-65-9 72-20-8 76-44-8 118-74-1 319-84-6 319-85-7 58-89-9 2385-85-5 608-93-5 8001-35-2	Pesticides	-	Maximum concentration of 0,1% refers to any article or ingredient included in a product.	Stockholm Convention (POP)
Phthalates, selected <ul style="list-style-type: none"> • Bis(2-ethylhexyl)phthalate (DEHP) • Diisobuthyl phthalate (DIBP) • Benzyl buthyl phtalate (BBP) • Dibuthyl phthalate (DBP) 	117-81-7 84-69-5 85-68-7 84-74-2	Plastiziser in rubber and plastics	-	In EEE maximum concentration of 0,1% by weight is in homogenous materials. For non-EEE products the maximum concentration of 0,1% refers to any article included in a product.	EU RoHS Reach Candidate list Reach Authorization list
Polychlorinated biphenyls (PCBs), all	Several	Insulation fluid in electrical systems, switch boards, transformer oil	-	Maximum concentration of 0,1% refers to any article or ingredient included in a product.	Stockholm Convention (POP)
Polychlorinated terphenyls (PCTs), all	61788-33-8	Insulation fluid in electrical systems, switch board transformers and condensers Wood and paper impregnation Softening agent	-	Maximum concentration of 0,1% refers to any article or ingredient included in a product	Reach Annex XVII
Short chain chloro paraffins (SCCP)	85535-84-8	Plasticizer and flame retardant for PVC and rubber	-	Maximum concentration of 0,1% refers to any article or ingredient included in a product.	Reach Candidate list

Name (substance, family or group)	CAS no. ²	Examples of known uses	Exempted uses	Concentration limit	Legal reference
Tetrachloethane, • 1,1,1,2-Tetrachloroethane • 1,1,2,2-Tetrachloroethane	630-20-6 79-34-5	Solvent, cleaning and degreasing of metals, paint removers, varnishes and lacquers	-	Maximum concentration of 0,1% refers to any article or ingredient included in a product	Reach Annex XVII
Trichlorobenzene	120-82-1	Solvent, Dielectric fluid, Degreaser, Lubricant	-	Maximum concentration of 0,1% refers to any article or ingredient included in a product	Reach Annex XVII
Trichloroethane, all • 1,1,1-Trichloroethane • 1,1,2-Trichloroethane	71-55-6 79-00-5	Solvent for chlorinated rubbers, fats, oils, waxes, and resins	-	Maximum concentration of 0,1% refers to any article or ingredient	Reach Annex XVII Montreal Protocol
Trichloromethane (chloroform)	67-66-3	Solvent	-	Maximum concentration of 0,1% refers to any article or ingredient included in a product	Reach Annex XVII
Triorganotin compounds, all	Several	Antifungal agents in industrial cooling systems, antifungal paints and agricultural	-	Maximum concentration of 0,1% refers to any article or ingredient included in a product.	Reach Annex XVII Reach Candidate list (individual substances marked in extended list)
Vinyl chloride (monomer)	75-01-4	Plastic materials (residues from production)	-	Maximum concentration of 0,1% refers to any article or ingredient included in a product.	Reach Annex XVII

Annex B Phase-out list – Substances to be included in Prohibited list

Name (substance, family or group)	CAS no. ⁴	Examples of known uses	When prohibited	Reason for inclusion	Legal scoop
Perfluorinated alkylcarboxylic acid (PFOA) and its salt	335-67-1 several	Coatings (e.g. Teflon), surfactants, fire-fighting foams, textiles and papers	Will be included in Epiroc prohibited list in 2019.	Reach Annex XVII	Prohibited to be present in any item in concentrations above 25 ppm of PFOA or PFOAS-salts, or 1000 ppb of any combination of PFOA-related substances from July 4 2020*

- 4th July 2022 Equipment used to manufacture semiconductors and latex printing ink
- 4th July 2023 Protective clothing, membranes intended for filtration in water treatment, production processes and effluent treatment; plasma nano-coatings
- ⁴CAS is the abbreviation for Chemical Abstract Service registry number. This is an international numeric identifier which designates only one chemical substance

Annex C – Clarification of legal references and scope

+ Scope

All substances included in Epiroc Prohibited list are prohibited to be used in any article delivered to Epiroc if not exclusively exempted. Regardless if the scope of the legal reference is limited to a product type or a region Epiroc has decided that all listed substances are prohibited in all products delivered to and sold by the Group unless else is clearly exempted in the list.

+ Phase-out list

Contains substances that we want to highlight since they will soon be added to the Prohibited list. Information about when the substances will be added to Prohibited list, in what regulation the substances are included, and in what products/materials the substance is known to be found in is given in this list. This list is short and meant to highlight needs for urgent substitution.

+ RoHS⁵ (abbreviation of Restriction of Hazardous substances)

Is a legislation banning use of hazardous substances in electric and electronic equipment to facilitate recycling. RoHS bans the use of lead, mercury, hexavalent chromium, cadmium, the brominated flame retardants PBDE and PBB and the plasticizers DEHP, DIBP, BBP and DBP in electric and electronic equipment (EEE), including cables and spare parts. Many components and spare parts incorporated in or used with Epiroc equipment are covered by this legislation when sold as individual parts.

To ensure compliance with this regulation Epiroc ban the use of these substances in concentrations above 0.1 % (0.01% for cadmium) in processes and any item delivered to the Group. For electric and electronic equipment (EEE), including cables and spare parts, the prohibition is valid for any homogenous material. For non-EEE the prohibition is valid for any individual article assembled in a product delivered to Epiroc.

+ REACH⁷ (abbreviation for Restriction, Evaluation, Authorisation and Restriction of Chemicals)

Is the name of EU's chemicals legislation. As chemicals are components in products and processes used in our industry, some parts of REACH applies to Epiroc. By REACH compliance Epiroc means that content above 0.1 % of any substance included in the Candidate list is declared and no substance is used in contradiction to the restrictions in Annex XVII.

+ REACH Candidate list

Is a list of substances identified to have long term negative effects on health and the environment (e.g. carcinogenic, mutagenic or reprotoxic (CMR), endocrine disruptors or persistent, bioaccumulative and toxic for the environment (PBT and vPvB)). These substances are also known as Substances of Very High Concern and the list as SVHC-list.

Information about content of any substance included in the Reach Candidate list of Substances of Very High Concern in concentrations above 0,1 % must be provided to Epiroc. The information must be provided for all individual articles assembled in any product delivered to Epiroc.

If any individual article contains substances included in the Candidate list Epiroc must actively provide such information to our customers. This requirement is stated in Article 33 of REACH. New substances are added to the Candidate list twice annually with instant duty to inform customers.

All substances in the Candidate list are included in the Declarable list unless they are also regulated by a more strict legislation. If regulated by a more strict regulation the substance is included in the Prohibited list.

+ REACH Authorisation list (REACH Annex XIV)

Some of the substances in the Candidate list are also included in REACH Authorisation list, meaning they cannot be used without a permit within EU. Epiroc do not differentiate between substances in the Authorisation list or the Candidate list – but note that substances included in Authorization list cannot be used within EU without a permit from the EU Commission.

+ Reach Annex XVII

Contains a list of substances for which the manufacturing, placing on the market or use (on its own, in mixtures or in an article) is limited or banned in European Union. The list contain substances that pose an unacceptable risk to human health or to the environment. To ensure compliance for Epiroc products, all relevant substances/entries in Reach Annex XVII are included in the Epiroc Prohibited list or Declarable list.

⁵RoHS – Restriction of Hazardous Substances in electric and electronic equipment (2011/65/EU).

⁶The plasticizers di(2-ethylhexyl)phthalate (DEHP), butylbenzylphthalate (BBP), dibutylphthalate (DBP) and diisobutylphthalate (DIBP) (0.1 %) are banned in EEE put on the market after July 22, 2019.

⁷REACH – Registration, Evaluation, Authorization and restriction of Chemicals (EC 1907/2006)

+ **Battery directive⁸**

Bans the use of cadmium (Cd) and mercury (Hg) in batteries to lower the negative impact on environment for waste batteries. Batteries must not contain more than 20 ppm Cd or 0.5 ppm Hg.

+ **Kyoto protocol (Greenhouse gases)**

Is an international agreement to fight global warming by reducing greenhouse gas concentrations in the atmosphere. Epiroc follows EU:s interpretation and prohibit any products to contain substances with a global warming potential (GWP) above 2500. Content of greenhouse gases identified to have a GWP below 2500 in concentrations above 0,1% should be declared.

+ **Montreal protocol on substances that deplete the ozone layer**

Is designed to protect the ozone layer by phasing out the production of groups of halogenated hydrocarbons that are responsible for ozone depletion. Epiroc prohibits the use of any of the controlled substances in the Protocol. All substances included in the Montreal protocol are included in the Epiroc Prohibited list.

+ **Stockholm Convention on Persistent Organic Pollutants (POPs)**

Is designed to eliminate or restrict the production and use of substances that persist in the environment, bio-accumulate through the food web, and pose a risk of causing adverse effects to human health and the environment. All substances included in the Stockholm Convention is included in Epiroc Prohibited list.

⁸Battery directive – Batteries, accumulators and waste batteries and accumulators (2006/66/EC)

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Performance unites us, innovation inspires us, and commitment drives us to keep moving forward. Count on Epiroc to deliver the solutions you need to succeed today and the technology to lead tomorrow.

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