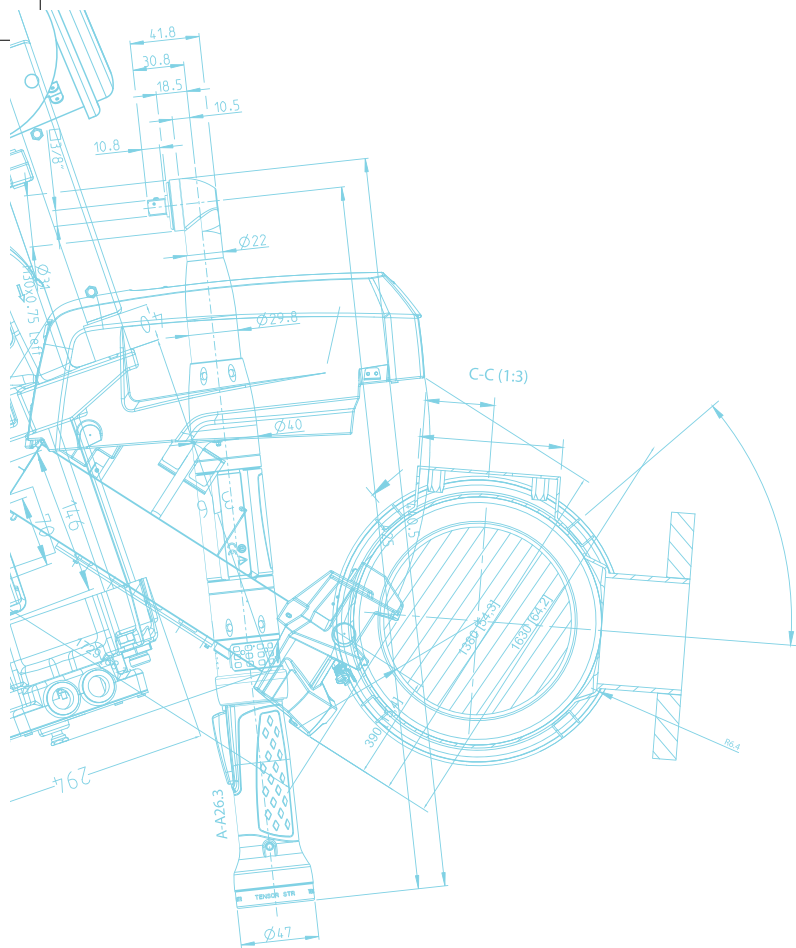


# Atlas Copco Group Prohibited List

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





**Changes from previous version:** No changes were made compared to the previous January 2020 version.

## Annex A Substances included in Atlas Copco Prohibited List

Name (substance, family or group)	CAS No. <sup>2</sup>	Example of known uses	Exempted uses/ exemptions	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)

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

Name (substance, family or group)	CAS No. <sup>2</sup>	Example of known uses	Exempted uses/ exemptions	Concentration limit	Legal reference
<b>Brominated flame retardants</b> <ul style="list-style-type: none"> <li>Hexabromocyclododecane (HBCDD), all</li> <li>Polybrominated biphenyls (PBBs), all</li> <li>Polybrominated diphenyl ethers (PBDEs), all</li> </ul>	Several	Flame retardant in electric and electronic equipment, plastics and textiles		<p>In EEE<sup>3</sup> the maximum concentration of PBBs and PBDEs is 0,1 % by weight in homogeneous materials</p> <p>For non-EEE products the maximum concentration of 0,1 % refers to any article included in a product</p>	<p>RoHS</p> <p>Reach Annex XVII</p> <p>Reach Candidate list (individual substances marked in extended list)</p> <p>Reach Authorization list (individual substances marked in extended list)</p> <p>Stockholm convention (POP)</p>
<b>Cadmium and cadmium compounds, all</b>	Several	Anti-corrosion surface treatment of metals Plating Stabilizer in polymers Pigment in paint and plastics Ni/Cd batteries and accumulators	<p>The prohibition does not cover use in electrical contacts</p> <p><b>Note</b> any content of cadmium compounds included in Declarable list must be declared even if the use is exempted Prohibited list</p>	<p>In EEE the maximum concentration of 0,01 % by weight is in homogeneous materials</p> <p>For non-EEE products the maximum concentration of 0,01 % refers to any article included in a product</p> <p>Maximum concentration in batteries of 0.002% cadmium by weight of battery</p>	<p>RoHS</p> <p>Reach Annex XVII</p> <p>Battery directive</p> <p>Reach Candidate list (individual substances marked in extended list)</p>
<b>Chlorinated and brominated dibenzo-p-dioxines or dibenzofuranes, all</b>	Several	By-product from industrial processes		Maximum concentration of 0,1 % refers to any article or ingredient included in a product	Stockholm Convention (POP)

<sup>3</sup>EEE: abbreviation for electric and electronic equipment

Name (substance, family or group)	CAS No. <sup>2</sup>	Example of known uses	Exempted uses/ exemptions	Concentration limit	Legal reference
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  <b>Note</b> any content of hexavalent chromium- compounds 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
Dicofol	115-32-2	Pesticide.		Maximum concentration of 0,1 % refers to any article or ingredient included in a product	Stockholm Convention (POP)
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
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	Several		Gas mixtures for which the (calculated) GWP is below 2500 are exempted		
<ul style="list-style-type: none"> <li>Hydrofluorocarbons (HFCs), all</li> <li>Perfluorocarbons (PFCs), all</li> <li>Sulphur hexafluoride</li> </ul>	Several 2551-62-4	Refrigerant applications	Individual fluorinated green-house gases - regardless of GWP - remain declarable  Reclaimed or recycled gas mixtures with (calculated) GWP above 2500 used for maintenance or servicing are exempted from the prohibition until January 1, 2030	Gas mixtures with a (calculated) global warming potential above 2500 are prohibited	Kyoto Protocol (GWP for individual substances given in extended list)

Name (substance, family or group)	CAS No. <sup>2</sup>	Example of known uses	Exempted uses/ exemptions	Concentration limit	Legal reference
Halogenated diphenylmethanes, selected <ul style="list-style-type: none"> <li>• Monomethyldibromodiphenylmethane (DBBT)</li> <li>• Monomethyldichlorodiphenylmethane (Ugilec 121)</li> <li>• Monomethyltetrachlorodiphenylmethane (Ugilec 141)</li> </ul>	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. <b>Note</b> any content of lead and lead compounds 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 Lightning 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

Name (substance, family or group)	CAS No. <sup>2</sup>	Example of known uses	Exempted uses/ exemptions	Concentration limit	Legal reference
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
PAHs (Polycyclic aromatic hydrocarbons), selected • Benzo[a]pyrene (BaP) • Benzo[e]pyrene (BeP) • Benz[e]acephenanthrylene (BaA) • Chrysen (CHR) • Benzo[b]fluoranthene (BbFA) • Benzo[j]fluoranthene (BjFA) • Benzo[k]fluoranthene (BkFA) • Dibenzo[a,h]anthracene (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 tires, base oils, rubber		Extender oils used may not contain more than 1 ppm Benzo(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



Name (substance, family or group)	CAS No. <sup>2</sup>	Example of known uses	Exempted uses/ exemptions	Concentration limit	Legal reference
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
Perfluorinated alkylcarboxylic acid (PFOA) and its salt	335-67-1 Several	Coatings (e.g. Teflon), surfactants, fire-fighting foams, textiles and papers		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	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					
• Aldrin	309-00-2				
• Chlordane	57-74-9				
• Chlordecone	143-50-0				
• Dieldrin	60-57-1				
• Endosulfan	115-29-7				
• α- Endosulfan	959-98-9				
• β-Endosulfan	33213-65-9				
• Endrin	72-20-8				
• Heptachlor	76-44-8				
• Hexachlorobenzene	118-74-1				
• α-HCH	319-84-6				
• β-HCH	319-85-7				
• Lindane	58-89-9				
• Mirex	2385-85-5				
• Pentachlorobenzene	608-93-5				
• Toxaphen	8001-35-2				
		Pesticides		Maximum concentration of 0,1 % refers to any article or ingredient included in a product	Stockholm Convention (POP)

Name (substance, family or group)	CAS No. <sup>2</sup>	Example of known uses	Exempted uses/ exemptions	Concentration limit	Legal reference
<b>Phthalates, selected</b> <ul style="list-style-type: none"> <li>• Bis(2-ethylhexyl)phthalate (DEHP)</li> <li>• Diisobutyl phthalate (DIBP)</li> <li>• Benzyl butyl phthalate (BBP)</li> <li>• Dibutyl phthalate (DBP)</li> </ul>	117-81-7 84-69-5 85-68-7 84-74-2	Plasticizer in rubber and plastics		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	EU RoHS  Reach Candidate list Reach Authorization list
<b>Polychlorinated biphenyls (PCBs), all</b>	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)
<b>Polychlorinated terphenyls (PCTs), all</b>	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
<b>Short chain chloro paraffins (SCCP)</b>	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
<b>Tetrachloethane,</b> <ul style="list-style-type: none"> <li>• 1,1,1,2-Tetrachloroethane</li> <li>• 1,1,2,2-Tetrachloroethane</li> </ul>	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
<b>Trichlorobenzene</b>	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

Name (substance, family or group)	CAS No. <sup>2</sup>	Example of known uses	Exempted uses/ exemptions	Concentration limit	Legal reference
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 included in a product	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	Anti-fungal agents in industrial cooling systems, anti-fungal 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. <sup>4</sup>	Example of known uses	When prohibited	Reason for inclusion	Legal scoop
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<sup>4</sup>CAS 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 Atlas Copco Prohibited list are prohibited to be used in any article delivered to Atlas Copco if not exclusively exempted. Regardless if the scope of the legal reference is limited to a product type or a region, Atlas Copco 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 the 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.

**California Proposition 65:** This regulation is applicable for all items sold in the State of California. The law requires businesses to provide proper warnings about exposures if the product contains substances known to cause cancer, birth defects or other reproductive harm to protect the general public from being exposed.

**RoHS<sup>5</sup> (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<sup>6</sup>, 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 Atlas Copco equipment are covered by this legislation when sold as individual parts.

To ensure compliance with this regulation Atlas Copco bans 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 homogeneous material. For non-EEE the prohibition is valid for any individual article assembled in a product delivered to Atlas Copco.

**REACH<sup>7</sup>(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 apply to Atlas Copco. By REACH compliance Atlas Copco 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)). 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 Atlas Copco. The information must be provided for all individual articles assembled in any product delivered to Atlas Copco.

If any individual article contains substances included in the Candidate list Atlas Copco 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 listed are included in the **Declarable list** unless they are also regulated by a stricter legislation. If regulated by a stricter 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 Authorization list, meaning they cannot be used without a permit within EU. Atlas Copco does not differentiate between substances in the Authorization 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 contains substances that pose an unacceptable risk to human health or to the environment. To ensure compliance for Atlas Copco products, all relevant substances/ entries in Reach Annex XVII are included in the Atlas Copco **Prohibited list** or **Declarable list**.

**Battery directive<sup>8</sup>:** 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. Atlas Copco follows EU's interpretation and prohibits 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. Atlas Copco prohibits the use of any of the controlled substances in the Protocol. All substances included in the Montreal protocol are included in Atlas Copco 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 are included in Atlas Copco Prohibited list.

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

<sup>6</sup>The plasticizers di(2-ethylhexyl)phthalate (DEHP), buthylbenzylphthalate (BBP), dibuthylphthalate (DBP) and diisobuthylphthalate (DIBP) (0,1 %) are banned in EEE put on the market after July 22, 2019

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

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

