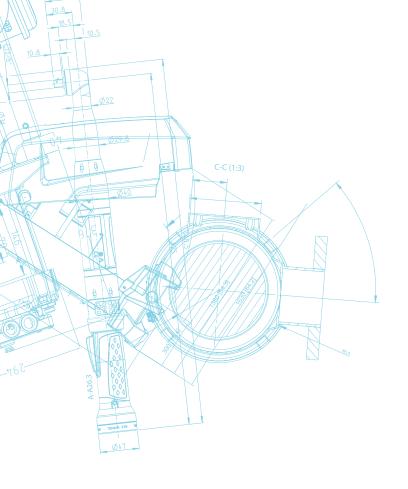


# Atlas Copco Group Prohibited List

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.



# Atlas Copco Group Prohibited List

#### Scope

The Prohibited list provides information about Atlas Copco's prohibitions on the use of listed substances in products and processes. 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. All Atlas Copco units as well as business partners, including suppliers, contractors, subcontractors, joint venture partners, and agents must comply with these prohibitions. Compliance with Atlas Copco 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<sup>1</sup> 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 can be found in the separate document **"Atlas Copco 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 Atlas Copco Prohibited list are listed in 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)

Atlas Copco 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.

<sup>1</sup>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 Atlas Copco unless stricter legal requirements apply.

#### Changes from previous version: New Addition to the Prohibited List

26 chemicals – or groups of chemicals - for which the Sunset Date has passed were added to the Prohibited List. All these chemicals are listed in Annex XIV (EU REACH Regulation) and therefore require authorization to allow their continued use after their respective Sunset Dates.

#### Changes from previous version: New addition to the Phase Out List

Due to REACH Authorizations the following chemicals are required to be phased out.

#	Name (substance, family or group)	CAS No.	Exempted uses/exemptions	Legal reference
1	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3		Reach Authorization list
2	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	Used to make paints, coatings, thinners, polymers, flexible and rigid foams, adhesives-sealants and plastic products.	Reach Authorization list
3	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1	For permanently coating and protecting wood surfaces.	Reach Authorization list
4	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate	15571-58-1	Found in polymers. Used as heat stabiliser.	Reach Authorization list
5	4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol	561-41-1	found in paints, coatings and adhesives.	Reach Authorization list
6	5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [1], 5-sec-butyl-2- (4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2] covering any of the individual stereoisomers of [1] and [2] or any combination thereof	Several		Reach Authorization list
7	Reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4- stannatetradecanoate and 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl] thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (reaction mass of DOTE and MOTE)	-		Reach Authorization list
8	Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP) with ≥0.1% w/w 4-heptylphenol, branched and linear (4-HPbl)	Several		Reach Authorization list

Name (substance, family or group)	CAS No. <sup>2</sup>	Example of known uses	Exempted uses/exemptions	Concentration limit	Legal reference
Anthracene oil	90640-80-5		May be used if an authorization has been granted	Maximum concentration of 0,1 % refers to any article or ingredient included in a product	Reach Candidate list Reach Authorization list
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
1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters or mixed decyl and hexyl and octyl diesters (with $\ge$ 0.3% of dihexyl phthalate)	-	Used as plasticizers, mainly in PVC. Found in glues, building materials, personal care products, detergents and surfactants, packaging, paints and textiles.	May be used if an authorization has been granted	Maximum concentration of 0,1 % refers to any article or ingredient included in a product	Reach Candidate list Reach Authorization 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
1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	71888-89-6	Used as plasticizers, mainly in PVC. Found in glues, building materials, personal care products, detergents and surfactants, packaging, paints and textiles.	May be used if an authorization has been granted	Maximum concentration of 0,1 % refers to any article or ingredient included in a product	Reach Candidate list Reach Authorization list
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	68515-42-4		May be used if an authorization has been granted	Maximum concentration of 0,1 % refers to any article or ingredient included in a product	Reach Candidate list Reach Authorization list
1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	Used as plasticizers, mainly in PVC. Found in glues, building materials, personal care products, detergents and surfactants, packaging, paints and textiles.	May be used if an authorization has been granted	Maximum concentration of 0,1 % refers to any article or ingredient included in a product	Reach Candidate list Reach Authorization list
1,2-Benzenedicarboxylic acid, dipentyl ester, branched and linear	84777-06-0		May be used if an authorization has been granted	Maximum concentration of 0,1 % refers to any article or ingredient included in a product	Reach Candidate list Reach Authorization list
1,2-Benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters	68648-93-1		May be used if an authorization has been granted	Maximum concentration of 0,1 % refers to any article or ingredient included in a product	Reach Candidate list Reach Authorization list
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)
Bis(2-methoxyethyl) ether	111-96-6	Also as solvent and in coatings, adhesives, sealants and in photolithography to make semiconductor chips	May be used if an authorization has been granted	Maximum concentration of 0,1 % refers to any article or ingredient included in a product	Reach Candidate list Reach Authorization list
Bis(2-methoxyethyl) phthalate	117-82-8	Used as a plasticizer, a solvent, and in molding compositions, adhesives, laminating cements, and flash bulb lacquers.	May be used if an authorization has been granted	Maximum concentration of 0,1 % refers to any article or ingredient included in a product	Reach Candidate list Reach Authorization list

Name (substance, family or group)	CAS No. <sup>2</sup>	Example of known uses	Exempted uses/exemptions	Concentration limit	Legal reference
<ul> <li>Brominated flame retardants</li> <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		In EEE <sup>3</sup> 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)
1-bromopropane (n-propyl bromide)	106-94-5	Solvent for fats, waxes and resins, in spray adhesives, degreaser, cleaner for metal and precision electronic components.	May be used if an authorization has been granted	Maximum concentration of 0,1 % refers to any article oringredient included in a product	Reach Candidate list Reach Authorization list
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 <b>Note</b> any content of cadmium compounds 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 <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)

<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
4,4'- Diaminodiphenylmethane (MDA)	101-77-9	Used as a chemical intermediate and monomer for polyamide and polymide resins, in the production of rubber and plastics and as an epoxy resin hardener in glues, paints, inks, polyvinylchloride products and microelectronic encapsulations.	May be used if an authorization has been granted	Maximum concentration of 0,1 % refers to any article or ingredient included in a product	Reach Candidate list Reach Authorization 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
1,2-dichloroethane (EDC)	107-06-2	It is used in solvents in closed systems for various extraction and cleaning purposes in organic synthesis (mainly PVC). It is also added to leaded gasoline as a lead scavenger	May be used if an authorization has been granted	Maximum concentration of 0,1 % refers to any article or ingredient included in a product	Reach Candidate list Reach Authorization list
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
2,2'-dichloro-4,4'-methylenedianiline (MOCA)	101-14-4	It is used primarily to make polyurethane products. It may be found in gears, gaskets, belt drives in cameras, computers, copy machines, wheels and pulleys for escalators and elevators, military applications. It is also used in glues, plastics and adhesives.	May be used if an authorization has been granted	Maximum concentration of 0,1 % refers to any article or ingredient included in a product	Reach Candidate list Reach Authorization list
Dicofol	115-32-2	Pesticide		Maximum concentration of 0,1% refers to any article or ingredient included in a product	Stockholm Convention (POP)
Dihexyl phthalate	84-75-3	Used as plasticizers, mainly in PVC. Found in glues, building materials, personal care products, detergents and surfactants, packaging, paints and textiles.	May be used if an authorization has been granted	Maximum concentration of 0,1 % refers to any article or ingredient included in a product	Reach Candidate list Reach Authorization list
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

Name (substance, family or group)	CAS No. <sup>2</sup>	Example of known uses	Exempted uses/ exemptions	Concentration limit	Legal reference
2,4-dinitrotoluene (2,4-DNT)	121-14-2	Used to make dyes, explosives, munitions, propellants, rubber chemicals, plastics, and other chemicals	May be used if an authorization has been granted	Maximum concentration of 0,1 % refers to any article or ingredient included in a product	Reach Candidate list Reach Authorization list
Dipentyl phthalate	131-18-0	Used as plasticizers, mainly in PVC. Found in glues, building materials, personal care products, detergents and surfactants, packaging, paints and textiles.	May be used if an authorization has been granted	Maximum concentration of 0,1 % refers to any article or ingredient included in a product	Reach Candidate list Reach Authorization list
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)
N, N'-Ditolyl-p-phenylenediamine, N-tolyl- N'-xylyl-p-phenylenediamine, or N, N'-dixylyl-p-phenylenediamine	27417-40-9/ 28726-30-9	Used in rubber (f.i. in pneumatic tires, gaskets, tubes,)	Prohibition applies to rubber antioxidants and styrene-butadiene rubber. All other use is exempted.	No concentration limit	Japan CSCL
Fluorinated greenhouse gases, selected • Hydrofluorocarbons (HFCs), all • Perfluorocarbons (PFCs), all • Sulphur hexafluoride	Several Several 2551-62-4	Refrigerant applications	Gas mixtures for which the (calculated) GWP is below 2500 are exempted. Individual fluorinated greenhouse gases - regardless of GWP - remain declarable. Reclaimed or recycled gas mixtures with (calculated) GWP above 2500 used for maintenance or servicing are excempted 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)
Formaldehyde, oligomeric reaction products with aniline	25214-70-4	Used to make coatings, paints and thinners	May be used if an authorization has been granted	Maximum concentration of 0,1 % refers to any article or ingredient included in a product	Reach Candidate list Reach Authorization list

<b>Name</b> (substance, family or group)	CAS No. <sup>2</sup>	Example of known uses	Exempted uses/ exemptions	Concentration limit	Legal reference
<ul> <li>Halogenated diphenylmethanes, selected</li> <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
2-(2H-1, 2, 3-benzotriazol-2-yl)-4, 6-Di-tertbutylphenol	3846-71-7	Used in plastics and rubbers. As absorbent and UV stabilizer. Used in adhesives and paints.	<ul> <li>Prohibition applies to:</li> <li>a) Adhesives (excluding those of animal and botanical origin), putty, and filling materials for closing up or sealing</li> <li>b) Paints and printing ink</li> <li>c) Lighting covers</li> <li>d) Buttons</li> <li>e) Tubes, bathtubs, and other plastic products (limited to molded products)</li> </ul>	No concentration limit	Japan CSCL
Hexachlorobutadiene	87-68-3	Used in the manufacture of rubber compounds. Also used in the production of lubricants, as a fluid for gyroscopes, as a heat transfer liquid, and in hydraulic fluids.		Maximum concentration of 0,1 % refers to any article or ingredient included in a product	Stockholm Convention (POP)
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)

Name (substance, family or group)	CAS No. <sup>2</sup>	Example of known uses	Exempted uses/ exemptions	Concentration limit	Legal reference
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 nonylphenolethoxylates, 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 <ul> <li>Chlorofluorocarbons (CFCs), all</li> <li>Halons, all</li> <li>Hydrobromofluorocarbons (HBFCs), all</li> <li>Hydrochlorofluorocarbons (HCFCs), all</li> <li>Methylbromide</li> <li>Trichloroethane (all isomers)</li> </ul>	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. <sup>2</sup>	Example of known uses	Exempted uses/ exemptions	Concentration limit	Legal reference
<ul> <li>PAHs (Polycyclic aromatic hydrocarbons), selected</li> <li>Benzo[a]pyrene (BaP)</li> <li>Benz[e]acephenanthrylene (BaA)</li> <li>Chrysen (CHR)</li> <li>Beno[b]fluoranthene (BbFA)</li> <li>Benzo[j]fluoranthene (BjFA)</li> <li>Beno[k]fluoranthene (BkFA)</li> <li>Dibenzo[a,h]anthracene (DBAhA)</li> </ul>	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 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
Pentachlorothiophenol or PCTP	133-49-3	PCTP is a halogenated flame retardant and acts as plasticizer in rubberized parts (foot pads, environmental gaskets, grommets). Also used in fuel/ oil/hydraulic system gaskets and seals.		Maximum concentration of 1 % (w/w) refers to any article or ingredient included in a product.	USA TSCA
n-pentyl-isopentyl phthalate	776297-69-9		May be used if an authorization has been granted	Maximum concentration of 0,1 % refers to any article or ingredient included in a product	Reach Candidate list Reach Authorization list

Name (substance, family or group)	CAS No. <sup>2</sup>	Example of known uses	Exempted uses/ exemptions	Concentration limit	Legal reference
Perfluorinated alkrylcarboxylic acid (PFOA), its salts and PFOA related substances	335-67-1 Several	Coatings (e.g. Teflon), surfactants, fire-fighting foams, textiles and papers		<ul> <li>Prohibited to be present in any item in concentrations above 25 ppm of PFOA or PFOAS-salts, or1000 ppb of any combination of PFOA-related substances from July 4 2020.</li> <li>4<sup>th</sup> July 2022 Equipment used to manufacture semiconductors and latex printing ink</li> <li>4<sup>th</sup> July 2023 Protective clothing, membranes intended for filtration in water treatment, production processes and effluent treatment; plasma nano-coatings</li> </ul>	Reach Annex XVII
Perfluorohexane sulfonic acid (PFHxS), its salts and PFHxS-related compounds		Aqueous Film-Forming Foams for fire-fighting; metal plating; textiles, leather and upholstery; polishing agents and cleaning/ washing agents; coatings, impregnation/proofing and within the manufacturing of electronics and semiconductors. Other potential use categories may include pesticides, flame retardants, paper and packaging, in the oil industry, and hydraulic fluids. PFHxS is and has been unintentionally produced during the electrochemical fluorination (ECF) processes of some other PFSAs. In many applications, PFHxS has been used as a replacement for perfluorooctane sulfonic acid (PFOS).		Maximum concentration of 0,1 % refers to any article or ingredient included in a product	Stockholm Convention (POP)
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)

Name (substance, family or group)	CAS No. <sup>2</sup>	Example of known uses	Exempted uses/ exemptions	Concentration limit	Legal reference
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				
<ul> <li>α- Endosulfan</li> </ul>	959-98-9				
<ul> <li>β-Endosulfan</li> </ul>	33213-65-9			Maximum concentration of	Stockholm Convention
• Endrin	72-20-8	Pesticides		0,1% refers to any article or ingredient included in a product	(POP)
Heptachlor	76-44-8			ingredient included in a product	
Hexachlorobenzene	118-74-1				
• α-HCH	319-84-6				
• β-НСН	319-85-7				
• Lindane	58-89-9				
• Mirex	2385-85-5				
Pentachlorobenzene	608-93-5				
• Toxaphen	8001-35-2				
Phthalates, selected				In EEE maximum concentration	
<ul> <li>Bis(2-ethhylhexyl)phthalate (DEHP)</li> </ul>	117-81-7			of 0.1% by weight is in homogenous materials	EU RoHS
<ul> <li>Diisobuthyl phthalate (DIBP)</li> </ul>	84-69-5	Plasticizer in rubber and plastics		For non-EEE products the	Reach Candidate list
<ul> <li>Benzyl buthyl phtalate (BBP)</li> </ul>	85-68-7	hastelet intrablet and plastics		maximum concentration of	Reach Authorization list
<ul> <li>Dibuthyl phthalate (DBP)</li> </ul>	84-74-2			0.1% refers to any article	ReactivitationZationiist
	0-7-2			included in a product	
Phenol, isopropylated phosphate (3:1) or PIP 3:1	68937-41-7	An important flame retardant and plasticizer in thermoplastics and vinyl. Included to meet flammability and electrical safety ratings. An anti-wear additive, or an anti-compressibility additive in hydraulic fluid, lubricating oils, lubricants and greases, various industrial coatings, adhesives, sealants and plastic articles. Paints & coatings.In fuel/oil/ hydraulic system gaskets and seals.	Exempted use: a) lubricants and greases b) as adhesive or sealant (until January 6, 2025)	No concentration limit	USA TSCA

Name (substance, family or group)	CAS No. <sup>2</sup>	Example of known uses	Exempted uses/ exemptions	Concentration limit	Legal reference
Pitch, coal tar, high-temp.	65996-93-2		May be used if an authorization has been granted	Maximum concentration of 0,1 % refers to any article or ingredient included in a product	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 normal paraffin (limited those in which the carbon number is 10 through 13 and the content of chlorine is more than 48% of the total weight)	85535-85-9	Used as flame retardant and plasticiser, as additives in metal working fluids, in sealants, paints, adhesives, textiles, leather fat and coatings.	<ul> <li>Prohibition applies to:</li> <li>a) Lubricating, cutting, and hydraulic oils</li> <li>b) Plasticizers for resin and rubber</li> <li>c) Paints (limited to waterproof and anti-flammable)</li> <li>d) Adhesives and sealing filler</li> </ul>	No concentration limit	Japan CSCL
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
Sodium perborate, perboric acid, sodium salt	Several		May be used if an authorization has been granted	Maximum concentration of 0,1 % refers to any article or ingredient included in a product	Reach Candidate list (individual substances marked in extended list) Reach Authorization list (individual substances marked in extended list)
Sodium peroxometaborate	7632-04-4	Bleaching agents for textiles, component of detergents, agent in neutralizing cold wave preparation, electroplating agent, agent in developing vat dyes	May be used if an authorization has been granted	Maximum concentration of 0,1 % refers to any article or ingredient included in a product	Reach Candidate list Reach Authorization list
5-tert-butyl-2,4,6-trinitro-m-xylene (Musk xylene)	81-15-2	Used as fragrance in detergents, fabric softeners, cleaning agents and air fresheners	May be used if an authorization has been granted	Maximum concentration of 0,1 % refers to any article or ingredient included in a product	Reach Candidate list Reach Authorization list

Name (substance, family or group)	CAS No. <sup>2</sup>	Example of known uses	Exempted uses/ exemptions	Concentration limit	Legal reference
<ul><li>Tetrachloethane,</li><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
4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated	Several	Used as a non-ionic detergent, emulsifier, and dispersing agent	May be used if an authorization has been granted	Maximum concentration of 0,1 % refers to any article or ingredient included in a product	Reach Candidate list Reach Authorization list
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
<ul><li>Trichloroethane, all</li><li>1,1,1-Trichloroethane</li><li>1,1,2-Trichloroethane</li></ul>	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
Trichloroethylene	79-01-6	Used mainly for degreasing of metal parts. Also used in paint removers/strippers, adhesives and spot removers.	May be used if an authorization has been granted	Maximum concentration of 0,1 % refers to any article or ingredient included in a product	Reach Candidate list Reach Authorization list
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)
Tris(2-chloroethyl) phosphate	115-96-8	Used as a plasticiser and viscosity regulator with flame-retarding properties for polyurethane, polyesters, polyvinyl chloride and other polymers.	May be used if an authorization has been granted	Maximum concentration of 0,1 % refers to any article or ingredient included in a product	Reach Candidate list Reach Authorization list

Name (substance, family or group)	CAS No. <sup>2</sup>	Example of known uses	Exempted uses/ exemptions	Concentration limit	Legal reference
2, 4, 6-Tri-tert-butylphenol	732-26-3	As an additive in fuel, oil, gasoline or lubricants.	Prohibition applies to: a) Antioxidants and other prepared additives (limited to those for lubricating and fuel oils); b) Lubricating oils All other use is exempted.	No concentration limit	Japan CSCL
Trixylyl phosphate	25155-23-1		May be used if an authorization has been granted	Maximum concentration of 0,1 % refers to any article or ingredient included in a product	Reach Candidate list Reach Authorization 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.	Example of known uses	When prohibited	Reason for inclusion	Legal scoop
4,4'-bis(dimethylamino)-4''- (methylamino)trityl alcohol	561-41-1	Found in paints, coatings and adhesives.	May 1, 2025	Carcinogenic	Reach Authorization list
2-ethylhexyl 10-ethyl-4,4- dioctyl-7-oxo-8-oxa-3,5-dithia-4- stannatetradecanoate	15571-58-1	Found in polymers. Used as heat stabiliser	May 1, 2025	Toxic to reproduction	Reach Authorization list
2,4-dinitrotoluene	121-14-2	<ul> <li>The predominant use of 2,4-dinitrotoluene is as an intermediate in the manufacture of polyurethanes.</li> <li>2,4-Dinitrotoluene is also used by the munitions industry, automotive safety systems or similar application. Examples include but are not limited to the following:</li> <li>Airbags;</li> <li>Seat belt</li> <li>pre-tensioners;</li> <li>Pyrotechnic actuators; or</li> <li>Gas generators/inflators and pyrotechnic initiators for any of the above-mentioned products</li> <li>Propellants/smokeless powders as an integral part of an article. Examples include but are not limited to the following:</li> <li>Ammunition</li> <li>Any other application where the production of energy/gas is used to create movement/generate propulsion of object(s)</li> <li>Refractory articles or similar application In plastic articles.</li> <li>Examples include but are not limited to the following:</li> <li>Containers</li> <li>Bottles</li> </ul>	To be defined	Carcinogenic properties	Europe is planning a restriction on placing on the market, or use, as a substance in articles for supply to the general public or to professional workers in concentrations above 0.1 %.
2,4-di-tert-butyl-6-(5- chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1	For permanently coating and protecting wood surfaces.	November 27, 2023	Persistent, Bioaccumulative and Toxic	Reach Authorization list
2-(2H-benzotriazol-2-yl)-4-(tert-butyl)- 6-(sec-butyl)phenol (UV-350)	36437-37-3		November 27, 2023	Persistent, Bioaccumulative and Toxic	Reach Authorization list

Name (substance, family or group)	CAS No.	Example of known uses	When prohibited	Reason for inclusion	Legal scoop
2-(2H-benzotriazol-2-yl)-4,6- ditertpentylphenol (UV-328)	25973-55-1	Used to make paints, coatings, thinners, polymers, flexible and rigid foams, adhesives-sealants and plastic products	November 27, 2023	Persistent, Bioaccumulative and Toxic and Persistent Organic Polutant	Reach Authorization list
Linear and branched perfluorocarboxylic acids of the formula CnF2n+1-C(= O)OH where n = 8, 9, 10, 11, 12, or 13 (C9-C14 PFCAs),including their salts, and any combinations thereof; Any C9-C14 PFCA-related substance having a perfluoro group with the formula CnF2n+1- directly attached to another carbon atom, where n = 8, 9, 10, 11, 12, or 13, including their salts and any combinations thereof; Any C9-C14 PFCA-related substance having a perfluoro group with the formula CnF2n+1- that it is not directly attached to another carbon atom, where n = 9, 10, 11, 12, 13 or 14 as one of the structural elements, including their salts and any combinations thereof.		Semiconductors, coatings, medical devices, fire fighting foams, filters, membranes, sealants, water/oil repellents, manufacturing of fluorochemicals	<ul> <li>Shall not be manufactured, or placed on the market as substances on their own from 25 February 2023.</li> <li>Shall not, from 25 February 2023, be used in, or placed on the market in: <ul> <li>(a) another substance, as a constituent;</li> <li>(b) a mixture;</li> </ul> </li> <li>(c) an article, except if the concentration in the substance, the mixture, or the article is below 25 ppb for the sum of C9-C14 PFCAs and their salts or 260 ppb for the sum of C9-C14 PFCA-related substances.</li> <li>Restriction applies as from 4 July 2023 to: <ul> <li>(i) textiles for oil- and water-repellency for the protection of workers from dangerous liquids that comprise risks to their health and safety;</li> </ul> </li> <li>(ii) the manufacture of polytetrafluoroethylene (PTFE) and polyvinylidene fluoride (PVDF) for the production of: <ul> <li>high performance, corrosion resistant gas filter membranes, water filter membranes and membranes for medical textiles;</li> <li>industrial waste heat exchanger equipment;</li> <li>industrial sealants capable of preventing leakage of volatile organic compounds and PM particulates</li> </ul> </li> <li>The use of C9-C14 PFCAs, their salts and C9-C14 PFCA-related substances shall be allowed until 4 July 2025 for: <ul> <li>(i) photolithography or etch processes in semiconductors on their own;</li> <li>(b) semiconductors incorporated in semi-finished and finished electronic equipment.</li> </ul> </li> </ul>	Bio-accumulating and persistent chemicals	EU REACH Restriction, entry 68

Name (substance, family or group)	CAS No.	Example of known uses	When prohibited	Reason for inclusion	Legal scoop
Reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa- 3,5-dithia-4-stannatetradecanoate and 2-ethylhexyl 10-ethyl-4-[[2-[(2- ethylhexyl)oxy]-2-oxoethyl]thio]- 4-octyl-7-oxo-8-oxa-3,5-dithia-4- stannatetradecanoate (reaction mass of DOTE and MOTE)	-		May 1, 2025	Toxic to reproduction	Reach Authorization list
Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP) with ≥0.1% w/w 4-heptylphenol, branched and linear (4-HPbI)	Several		May 1, 2025	Endocrine disrupting	Reach Authorization list
5-sec-butyl-2-(2,4-dimethylcyclohex- 3-en-1-yl)-5-methyl-1,3-dioxane [1], 5-sec-butyl-2-(4,6-dimethylcyclohex-3- en-1-yl)-5-methyl-1,3-dioxane [2] covering any of the individual stereoisomers of [1] and [2] or any combination thereof	Several		August 27, 2023	Persistent, Bioaccumulative and Toxic	Reach Authorization list
2,4,6-tris(tert-butyl)phenol or 2,4,6 TTBP	732-26-3	Used in fuels, oils, lubricants, hydraulic fluids, fuel injector cleaners and in fuel antioxidants.	January 6, 2026	Persistent, bio- accumulating and toxic properties.	USA TSCA

### 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>4</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>5</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>6</sup> (abbreviation for Registration, Evaluation, Authorization 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) or endocrine disruptors). 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 Authorization 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>7</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, bioaccumulate 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.

**TSCA (abbreviation of Toxic Substance Control Act):** TSCA regulates the manufacture, import, distribution, use, release, and disposal of new and existing chemicals in U.S. Commerce. Through TSCA the Environmental Protection Agency (EPA) can impose restrictions or bans of hazardous substances.

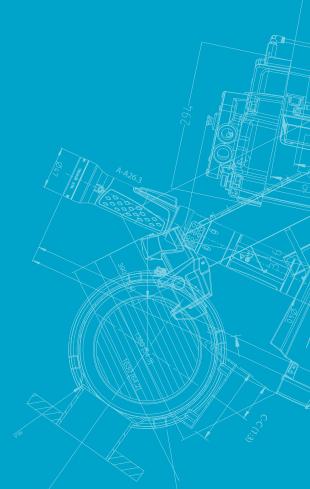
Japan CSCL: Under the Chemical Substance Control Law class I substances are prohibited to be manufactured or imported into Japan for certain products and mixtures. These class I substances are considered to be persistent, highly bioaccumulative, and have a risk of long-term toxicity to humans.

<sup>4</sup>RoHS – Restriction of Hazardous Substances in electric and electronic equipment (2011/65/EU).

<sup>5</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.

 $^6\text{REACH}$  – Registration, Evaluation, Authorization and restriction of Chemicals (EC 1907/2006)

<sup>7</sup>Battery directive – Batteries, accumulators and waste batteries and accumulators (2006/66/EC)





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