

Belimo List of Hazardous Substances (LHS)

Status: v2.0/ 19-Jan-2023

Purpose

Belimo strives to avoid the use of materials that place an unnecessary strain on the environment and are difficult to discard. It is our goal to avoid the use of critical substances which pose a risk to the environment and to people's health and safety. With this Belimo List of Hazardous Substances (LHS) we inform our suppliers regarding the ban or restricted use of substances when present in a product (preparation, article and component) supplied to us.

This LHS is published on Belimo's website. It is the Supplier's responsibility to always comply with the currently valid version of the LHS on Belimo's website. A deviation from the requirements given in the LHS shall be reported to Belimo immediately. This LHS is governed by clause 15 of Belimo's Supply Agreement.

Belimo List of Hazardous Substances				
Possible Applicability	Regulated Substance(s)	CAS No.	Limit % w/w	Regulation
All Products (Preparation, Article and Component)				
All Products	See candidate list with SVHC	various	0.1	EU: (EC) No 1907/2006 (REACH)
	See authorization list Annex XIV	various	varying	
	See restriction list Annex XVII	various	varying	
Electrical and Electronic Equipment				
All EEE	Lead and its compounds	7439-92-1	0.1	EU: 2011/65/EU (RoHS 2) and (EU) 2015/863 (RoHS 3) CH: ChemRRV Ann. 1.7, 1.9, 2.16(6)
	Cadmium and its compounds	7440-43-9	0.01	
	Mercury and its compounds	7439-97-6	0.1	
	Chromium ^{VI} compounds (Cr ^{VI} , hexavalent chromium)	18540-29-9	0.1	
	Polybrominated biphenyls (PBBs)	various	0.1	
	Polybrominated diphenylethers (PBDEs)	various	0.1	
	Bis(2-ethylhexyl) phthalate (DEHP)	117-81-7	0.1	
	Butyl benzyl phthalate (BBP)	85-68-7	0.1	
	Dibutyl phthalate (DBP)	84-74-2	0.1	
	Diisobutyl phthalate (DIBP)	84-69-5	0.1	
Batteries				
Batteries and accumulators, coin cell batteries	Mercury	7439-97-6	0.0001	EU: 2006/66/EC DE: BattG CH: ChemRRV Ann. 2.15
	Cadmium	7440-43-9	0.002	
	Lead	7439-92-1	0.004	

Electrical Components				
Capacitors and transformers	Halogenated aromatic substances: Monohalogenated Polyhalogenated	various	0.05 0.005	EU: (EC) No 1907/2006 (REACH) Ann. XVII DE: ChemVerbotsV CH: ChemRRV Ann. 2.14 US: TSCA (15 USC 2605)
	Polychlorinated biphenyls (PCBs)	various	0.005	
Plastic Parts				
Colored plastics (pigments)	Cadmium	7440-43-9	0.01	EU: (EC) No 1907/2006 (REACH) Ann. XVII DE: ChemVerbotsV CH: ChemRRV Ann. 2.9
Flame retardants in circuit boards and plastic parts	Polybrominated biphenyls (PBBs)	various	0.1	EU: 2011/65/EU (RoHS 2) CH: ChemRRV Ann. 1.9
	Polybrominated diphenylethers (PBDEs)	various	0.1	EU: 2011/65/EU (RoHS 2) CH: ChemRRV Ann. 1.9
	Octabromdiphenylether (OBDE)	32536-52-0	0.1	EU: (EC) No 1907/2006 (REACH) Ann. XVII DE: ChemVerbotsV
	Pentabromodiphenylether (PeBDE)	32534-81-9	0.1	EU: (EU) 2019/1021 (POP), limit from EU RoHS
Sealing compounds, plastics and rubber	Short-chained chlorinated paraffins (C ₁₀ -C ₁₃)	85535-84-8 and others	1.0	CH: ChemRRV Ann. 1.2
Metal Alloys				
Steel, aluminium, copper alloys	Lead in steel alloys in aluminium alloys in copper alloys	7439-92-1	0.35 0.4 4.0	EU: 2011/65/EU (RoHS 2)
Metallic Coatings				
Metallic coatings	Cadmium	7440-43-9	0	EU: (EC) No 1907/2006 (REACH) Ann. XVII DE: ChemVerbotsV CH: ChemRRV Ann. 2.9 / 2.16(2)
	Chromium ^{VI} compounds (Cr ^{VI})	18540-29-9	0.1	
Zinc coating	Cadmium	7440-43-9	0.025	CH: ChemRRV Ann. 2.16(3)
Packaging Material				
Packaging and wrapping material and its compounds	Sum of all heavy metals: [lead, cadmium, chromium ^{VI} compounds (Cr ^{VI}), mercury]	various see above	0.01	EU: 94/62/EC DE: VerpackV CH: Chem RRV Ann. 2.16(4)
Painted or Varnished Products				
Coatings and varnishes	Cadmium und cadmium-compounds Lead and lead-compounds	various see above	0.01	EU: (EC) No 1907/2006 (REACH) Ann. XVII CH: ChemRRV Ann. 2.8
Insulation Material				
Asbestos	Asbestos a. Aktinolith	1332-21-4 77536-66-4	0	CH: ChemRRV Ann. 1.6

	b. Amosit c. Anthophyllit d. Chrysotil e. Krokydolith f. Tremolit	12172-73-5 77536-67-5 12001-29-5 12001-28-4 77536-68-6		Ship recycling: SOLAS II-1, Regulation 3-5 and MSC.1/Circ.1379
Restricted Substances (applicable for all Products)				
Flame retardants	Dodecachloropentacyclo [5.3.0.02,6.03,9.04,8] decane (Mirex)	2385-85-5	No intention ally added content	Canadian Environmental Protection Act (CEPA) 1999, Prohibition of Certain Toxic Substances Regulations, 2012
Solvents	Hexachlorobutadiene, which has the molecular formula C4Cl6 (HCBd)	87-68-3		
Plasticisers and others	Hexachlorobenzene (HCB)	118-74-1		
Solvents and PCB manufacturing	2-methoxyethanol, which has the molecular formula C3H8O2 (2-ME)	109-86-4		
Flame retardants and plasticisers	Polychlorinated naphthalenes (PCN)	70776-03-3 and others		
In lubricants for high-speed motors	Benzenamine, N-phenyl-, reaction products with styrene and 2,4,4-trimethylpentene (BNST)	68921-45-9		
Flame retardants and plasticisers	Polychlorinated naphthalenes (see also CEPA)	70776-03-3 and others	0.1	Ship recycling: MEPC.269(68): 2015, HKC, (EU) No 1257/2013
Coatings and surface treatments	Radioactive substances Perfluorooctane sulfonic acid (PFOS)	various 1763-23-1	0 0	
Flame protection in plastics and textiles, pesticides	30 Persistant organic pollutants (POP) with "sub-substances"	various	various limits	EU: (EU) 2019/1021 (POP)
Flame retardants	Decabromodiphenyl ether (DecaBDE)	1163-19-5	0	US: TSCA (2021 Feb.)
Flame retardants, plasticisers, lubricants	Phenol, isopropylated phosphate (3:1) (PIP 3:1)	68937-41-7	0	
Reactants in processing, additive to fuels and lubricants	2,4,6-tris(tert-butyl)phenol (2,4,6-TTBP)	732-26-3	0.3	
Solvents or heat transfer fluid	Hexachlorobutadiene (HCBd)	87-68-3	0	
Rubbers	Pentachlorothiophenol (PCTP)	133-49-3	1	

Responsible Sourcing		
Report the presence of these materials by using the Conflict Minerals Reporting Template (CMRT)	Tin, Tungsten, Tantal, Gold (3TG)	Conflict Minerals Reporting: US: Dodd Frank Act, OECD Due Diligence, CH: VSoTr
Report the presence of these materials by using the Extended Minerals Reporting Template (EMRT)	Cobalt, Mica	No legislation

Revision History

Version	Revision Date	Remarks
v1.0	15-Aug-2016	New release including additional hazardous substances based on new country regulations or application fields
v2.0	19-Jan-2023	Additions: POP, TSCA, Responsible Sourcing