

List of Prohibited Hazardous Substances

Version 7.2

Latest amendment: 2021-06-23

Non-exhaustive summary of legal bans or restrictions of hazardous substances
in home appliances and products marketed under BSH brands

Substance/ substance group	CAS No.	Affected application	Limit value (wt.%) or (mg/kg) ¹⁾	Exemptions	Legal regulations ²⁾
General bans or restrictions of hazardous substances in home appliances marketed under BSH brands					
Asbestos	1332-21-4 see below ³⁾	All applications	n.g.	no	REACH Annex XVII
Decabromodiphenyl ether (commercial mixture, c-decaBDE)	1163-19-5	All applications, e.g. flame retardant	n.g.	no	Stockholm Convention; TSCA
Polychlorinated biphenyls (PCBs)	1336-36-3	All applications	0.005 % (total)	no	Stockholm Convention
Pentachlorophenol (PCP) Pentachloro-phenol, sodium salt Other PCP salts and compounds	87-86-5 131-52-2	All applications	0.0005 % (total)	no	Stockholm Convention
Pentachlorothiophenol (PCTP)	133-49-3	All applications	1 %	no	TSCA
Hexachlorobutadiene (HCBd)	87-68-3	All applications	0	no	TSCA
Hexabromocyclododecane (HBCDD)	25637-99-4, 3194-55-6	All applications, e.g. flame retardant	0.01 %	no	Stockholm Convention
Perfluorooctane sulfonic acid and its metal salts, halides, amides, and other derivatives including polymers (PFOS) and Perfluorooctane sulfonyl fluoride	1763-23-1 307-35-7	All applications	0.001 %	yes	Stockholm Convention
Short chain chlorinated paraffins, C₁₀- C₁₃, (SCCP)	85535-84-8	All applications, e.g. softener, flame retardant	n.g.	no	Stockholm Convention
Chlorofluorocarbons (CFC), Hydrochlorofluorocarbons (HCFC)	see below ⁴⁾	All applications, e.g. refrigerant, blowing agent	n.g.	no	Montreal protocol, F-Gases
Perfluorinated carbons (FC)	n.a.	All applications	n.g.	no	Montreal protocol, F-Gases; REACH
Hydrofluorocarbons (HFC)	n.a.	All applications in cooling appliances	n.g.	no	Montreal protocol, F-Gases
Dimethyl fumarate (DMF)	624-49-7	All applications	0.1 mg/kg	no	REACH Annex XVII, Biocidal Products
Tetrabromobisphenol A, additive (TBBPA)	79-94-7	All applications, e.g. flame retardant	0.1 %	no	REACH
Radioactive substances	n.a.	Metals	n.g.	no	REACH
Phenol, Isopropylated Phosphate 3:1 (PIP 3:1)	68937-41-7	All applications	0	yes	TSCA

Substance/ substance group	CAS No.	Affected application	Limit value (wt.%) or (mg/kg) ¹⁾	Exemp- tions	Legal regulations ²⁾
RoHS Restrictions of hazardous substances in home appliances, with exemptions					
Lead Lead compounds	7439-92-1	All applications, e.g. solders, alloy in copper, aluminium and steel	0.1 %	yes	RoHS
Cadmium Cadmium compounds	7440-43-9	All applications, e.g. metal surface coating, pigments and stabilizers in plastics	0.01 %	yes	RoHS
Mercury Mercury compounds	7439-97-6	All applications, e.g. lamps	0.1 %	yes	RoHS
Hexavalent chromium (Cr ^{VI})	n.a.	All applications, e.g. metal surface coating	0.1 %	yes	RoHS
Polybrominated biphenyls (PBBs)	n.a.	All applications, e.g. flame retardant	0.1 %	no	RoHS
Polybromodiphenyl ethers (PBDE)	n.a.	All applications, e.g. flame retardant	0.1 %	no	RoHS
Di-(2-ethylhexyl)phthalate (DEHP)	117-81-7	All applications, e.g. softener	0.1 %	no	RoHS
Di-n-butyl phthalate (DBP)	84-74-2	All applications, e.g. softener	0.1 %	no	RoHS
Di-isobutyl phthalate (DIBP)	84-69-5	All applications, e.g. softener	0.1 %	no	RoHS
Benzyl butyl phthalate (BBP)	85-68-7	All applications, e.g. softener	0.1 %	no	RoHS
Restrictions of hazardous substances in batteries and accumulators					
Cadmium	7440-43-9	Portable batteries and accumulators	0.002 %	yes	Batteries
Mercury	7439-97-6	Batteries and accumulators	0.0005 %	yes	Batteries
		Button cells	2%		Batteries
Restrictions of hazardous substances in Insulating materials					
Ceramic fibres (aluminosilicate)		Insulation materials	0.1 %	yes	REACH SVHC
Man-made vitreous (silicate) fibres with random orientation with oxide of sodium, potassium, calcium, magnesium and barium content >18 % by mass		Insulation materials	0.1 % (total)	yes	ChemVerbotsV
Restrictions of polycyclic-aromatic hydrocarbons (PAHs) in materials with intended or reasonably foreseeable skin contact					
Polycyclic aromatic hydrocarbons (PAHs)	see below ⁵⁾	All applications , e.g. black carbon, rubber		yes	REACH Annex XVII, Entry No.50
Biocides, treated articles					
All substances with biocidal effects	n.a.	All applications of treated articles	0.1 mg/kg	yes	Biocidal Products

Substance/ substance group	CAS No.	Affected application	Limit value (wt. %) or (mg/kg) ¹⁾	Exemp- tions	Legal regulations ²⁾
Packaging					
Heavy metals (lead, cadmium, hexavalent chromium, mercury)	n.a.	Packaging and packaging components	0.01 % (total)	no	REACH Annex XVII
PVC	n.a.	Packaging and packaging components	n.g.	no	
Restrictions of hazardous substances in New-product-development, substances prohibited within EU products					
Bisphenol A	80-05-7	All applications with food contact	n.g.	yes	REACH SVHC, REACH Annex XVII
Phthalates, C₄-C₈ ester	n.a.	All applications, e.g. softener	0.1 %	yes	REACH SVHC
N,N-dimethylacetamide (DMAC)	127-19-5	All applications	0.1 %	yes	REACH SVHC
4-Nonylphenol, branched and linear	n.a.	All applications	0.1 %	yes	REACH SVHC
Diazene-1,2-dicarboxamide (ADCA)	123-77-3	All applications	0.1 %	yes	REACH SVHC
Imidazolidine-2-thione (ETU)	96-45-7	All applications	0.1 %	yes	REACH SVHC
1-Methyl-2-pyrrolidone	872-50-4	All applications	0.1 %	yes	REACH SVHC
Boric acid	10043-35-3, 11113-50-1	All applications	0.1 %	yes	REACH SVHC
Disodium tetraborate anhydrous	1303-96-4, 1330-43-4, 12179-04-3	All applications	0.1 %	yes	REACH SVHC
Sn-organic compounds, e.g. Dibutyltin dichloride	n.a.	All applications	0.1 %	yes	REACH SVHC

Substance/ substance group	CAS No.	Affected application	Limit value (wt.%) or (mg/kg) ¹⁾	Exemp- tions	Legal regulations ²⁾
---------------------------------------	----------------	---------------------------------	--	-------------------------	--

Notes

1) "n.g." means that no limit value applies; the respective analytical detection limit has to be considered

2) Legal regulations

Batteries	Directive 2006/66/EC of the European Parliament and of the Council on batteries and accumulators and waste batteries and accumulators; including all amendments
Biocidal Products	Regulation 528/2012/EU of the European Parliament and of the Council concerning the making available on the market and use of biocidal products; including all amendments
ChemVerbotsV	German chemicals prohibition ordinance (Chemikalienverbotsverordnung)
F-Gases	Regulation 517/2014/EU of the European Parliament and the Council on fluorinated greenhouse gases; including all amendments
Montreal protocol	Montreal Protocol on Substances that Deplete the Ozone Layer
POP	Regulation (EU) 2019/1021 of the European Parliament and of the Council of 20 June
REACH	Regulation 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
REACH SVHC	Candidate list of substances of very high concern
RoHS	Directive 2011/65/EU of the European Parliament and of the Council on the restriction of the use of certain hazardous substances in electrical and electronic equipment; including all amendments
Stockholm Convention	Stockholm Convention on Persistent organic pollutants (POPs), revised in 2019
TSCA	US Toxic Substances Control Act, Section 6, Part 751

3) Asbestos

Aktinolit	CAS No. 77536-66-4	5) PAHs Benzo[a]pyrene (BaP)	CAS No. 50-32-9
Amosite	12172-73-5	Dibenzo[a,h]anthracene (DBAhA)	53-70-3
Anthrophyllite	77536-67-5	Benzo[a]anthracene (BaA)	56-55-3
Chrysotile	12001-29-5	Chrysen (CHR)	218-01-9
Crocidolite	12001-28-4	Benzo[j]fluoranthene (BjFA)	205-82-3
Tremolite	77536-68-6	Benzo[b]fluoranthene (BbFA)	205-99-2
		Benzo[k]fluoranthene (BkFA)	207-08-9
		Benzo[e]pyrene (BeP)	192-97-2

4) CFCs, H-CFCs

Trichlorofluoromethane (R11)	CAS No. 75-69-4
Dichlorodifluoromethane (R12)	75-71-8
Chlorodifluoromethane (R22)	75-45-6
1,1-Dichlor-1-fluorethan (R141b)	1717-00-6