Skanska in Sweden’s criteria for chemical substances

Products (chemical products and articles) must be controlled against Skanska in Sweden’s list of *restricted* substances, and Skanska in Sweden’s criteria for *phase-out* substances. Chemical products must also be controlled against Skanska in Sweden’s criteria for *observe hazard*. A product that fulfills all criteria is *approved*.

Restricted substance standard

The Restricted substance standard contains substances that do not comply with Skanska in Sweden's environmental policy or Swedish law. Purchase or usage of products containing these substances is forbidden within Skanska's business in Sweden or by any of its subcontractors.

Substance	Example of usage	Conc. limits (weight %)
Acrylamide Monomer	Laboratory analysis, glue, paint, plastic, varnish, grouting/injection agent, water purification.	<0,1
Arsenic As wood preservative. (This restriction is also valid for usage in contact with ground and water and for usage in marine environment. Exceptions exist.)	Wood preservative.	0
Asbestos	Ventilation ducts, chipboard, insulation and filling and reinforcing material. May be found in older constructions and products.	<0,5
Brominated Flame Retardants *Approx. 70 different BFRs* PBT PBB PentaBDE octaBDE decaBDE HBCDD	XPS and EPS insulation materials, certain plastic, textiles, electric switches, relays, insulation and fuses, vinyl floor covering.	<0,1
Cadmium As surface treatments, stabilizer and pigment In electrical and electronic equipment. Exempt for use in NiCd batteries.	Surface treatments, stabilizer and pigment in electrical and electronic equipment.	<0,01
CFC	Cooling/refrigeration agent, propellant agent in insulation, jointing, sealing materials and aerosol cans.	0
Chlorinated solvents Exceptions exist, for example, dichloromethane used in analysis work.	Cleaning products.	<0,5
Chloromethyl methyl ether Exceptions for use in research, development and analysis in professional use.	Cleaning agents.	<0,1
Chrome As wood preservative above ground. Exceptions exist.	Wood-preservative used in pressure impregnation.	<0,5
Chromium VI Soluble chromium VI in cement and cement-containing preparations, and in electrical and electronic equipment.	Chromium VI occurs naturally in cement, but should be actively reduced by the producer. Chromium VI is also used in surface treatments.	<0,0002 (in cement) <0,1 (in electrical and electronic equipment)
Coal tar/Creosote Treated wood for use inside buildings, in playgrounds, parks and outdoor recreational and leisure facilities.	Wood prservative.	0
1,4-dichlorobenzene	Solvents and biocide.	<0,1

Substance	Example of usage	Conc. limits (weight %)
Erionite	Potential impurity in natural materials used as catalytic converters and ion exchangers.	<1
Phtalates DEHP DBP BBP DIBP	PVC softner, cables, electronics, adhesives and sealants.	<0,1
Halons	Cooling/refrigeration agent and used in fire-extinguishing equipment.	0
HCFC Restrictions in/at new installments and filling up in existing systems.	Cooling/refrigeration agent.	0
Lead In electrical and electronic equipment.	Soldering.	<0,1
Mercury Batteries, thermometers, detonators, measuring instruments and electrical.	In accordance with the Swedish directive (1998:944) there is a general Swedish ban on mercury with specified exclusions.	0
Nonylphenol and nonylphenol ethoxylate For cleaning, metal working or as components in pesticides and biocides.	Paints, resins, protective coatings, detergents, degreasers, pesticides, cleaning agents.	<0,1
PCB	Softener used in sealants agents, capacitors and transformer oils.	0
PFOS	Used in e.g. impregnated paper and textiles, cleaning agents (such as floor polish) and fire detergents.	<0,005 (as a substance or in preparations) <0,1 (in semi-finished products or in articles) <1 µg/m^2 (in textiles or other covered materials)
Tin compounds (organo-stannic compounds) Boat and anti-fouling paints and in any totally or partly submerged appliance or equipment.	Additive in paint.	0

Phase-out and Observe Hazard

Phase-out

Products containing substances with at least one of the properties mentioned below may not be used within Skanska's business in Sweden or by its subcontractors if the concentration exceeds the limit concentration in the column *Phase-out*. Exceptions may only be made if there is no alternative product. In such cases, a reason must be stated.

The list of properties is identical with BASTAs properties criteria. The concentration calculations are based on the product as it is delivered to the worksite or the corresponding site.

Observe hazard

Observe hazard only applies to some of the below mentioned property criteria, and is only valid for chemical products. Chemical products containing substances with at least one of the properties mentioned below within the concentration interval stated in the column *Observe hazard* must be handled in such a manner that the risks involved are minimized. An *approved* product shall always be chosen, if possible.

Products containing specific substances/groups of substances of which there is a lack of knowledge may also be evaluated as *phase-out* or *observe hazard*, based on the precautionary principle. Exceptions from some of the below stated property criteria for certain product groups may also occur.

Base criteria that applies to all products

Properties (substances)	Criteria	Phase-out	Observe hazard
		Concentration (weight %)[1)]	
1. Carcinogenic a)	Carcinogenic in category 1A or 1B (H350).[1)]	≥0,1	-
b)	Carcinogenic in category 2 (H351). [1)]	≥1	-
2. Mutagenic a)	Mutagenic in category 1A or 1B (H340). [1)]	≥0,1	-
b)	Mutagenic in category 2 (H341). [1)]	≥1	-
3. Toxic to reproduction a)	Toxic to reproduction in category 1A or 1B (H360). [1)]	≥0,1	-
b)	Toxic to reproduction in category 2 (H361). [1)]	≥3	-
4. Effect during lactation	Toxic to reproduction – additional category: For effects on or via lactation children (H362) [1)]	≥ 0,3	-
5. Endocrine disrupting a)	Endocrine disrupters – Category 1 (EUH380 and EUH430).	≥ 0,1	-
b)	Endocrine disrupters – Category 2 (EUH381 and EUH431).	≥1	-
c)	Endocrine disrupters – according to: - Eu CoRAP - Danish centrum for endocrine disruptors - Chemsec SIN-list	≥ 0,1	-
6. PBT	Persistent, Bio accumulative and toxic substances (PBT) – (EUH440)	≥0,1	-
7. vPvB	very Persistent and very Bio accumulative substances (vPvB) – (EUH441)	≥0,1	-
8. PFAS	PFAS	≥0,1	
9. PMT	Persistent, mobile and toxic substances (PMT) – (EUH450)	≥0,1	
10. vPvM	very Persistent and very Mobile substances (vPvM) – (EUH451)	≥0,1	
11. Lead (Pb)	Pure substances or compounds of lead (Pb)	≥0,1 [5)]	-
12. Mercury (Hg)	Pure substances or compounds of mercury (Hg)	Total ban [3) 5)]	-
13. Cadmium (Cd)	Pure substances or compounds of cadmium (Cd)	≥0,01 [5)]	-
14. Hazardous to the ozone layer and Fluorinated greenhouse gases a)	Hazardous to the ozone layer (H420) and all substances listed in the Annex to Regulation (EC) No 1005/2009 [4]	≥0,1	-
b)	Synthetically produced fluorinated gases (f-gases) that are potent greenhouse gases and contribute to global warming. Includes fluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride, (SF6), see substances listed in Annex I to Regulation (EU) No 517/2014 [4)]	≥0,1	-

Properties (substances)		Criteria	Phase-out	Observe hazard
			Concentration (weight %)[1)]	
15. Sensitising	a)	Respiratory sensitisation category 1A (H334) [1)]	≥0,1	-
	b)	Respiratory sensitisation category 1 and 1B (H334) [1)]	≥0,2 gases ≥1 solid / liquid	-
	c)	Skin sensitisation category 1A (H317) [1)]	≥0,1	-
	d)	Skin sensitisation category 1 and 1B (H317) [1)]	≥1	-
16. Acute toxic		Acute toxicity in category 1, 2 or 3 Oral (H300, H301) Dermal (H310, H311) Inhalation (H330 eller H331)	Refers to the products classification. [5)]	0,1 – limit for *phase out*

17. Specific target organ toxicity after single exposure	a)	Causes damage to organs after single exposure in category 1. (H370) [1)]	≥1	0,1 - <10
	b)	Causes damage to organs after single exposure in category 2 (H371) [1)]	≥10	0,1 - <1
	c)	Chemical products with properties according to the classification Aspiration toxicity in category 1 (H304) [2)]	Refers to the product's classification [2)]	-
18. Specific target organ toxicity after repeated exposure	a)	Causes Specific damage to organs through repeated exposure in category 1 (H372) [1)]	≥1	0,1 - <1
	b)	Causes Specific damage to organs through repeated exposure in category 2 (H373) [1)]	≥10	0,1 - <10
19. Volatile organic Compounds		Substances with an initial boiling point < 250 ºC measured at a standard pressure of 101,3 kPa **and** has properties according to any of the hazard classes: Fatal, Toxic and Harmful if inhaled (H330, H331, H332) May cause drowsiness or dizziness (H336) May cause damage to organs (H371) or May cause damage to organs through prolonged or repeated exposure (H373).	≥10 [5)]	-
20. Dangerous to the environment	a)	Hazardous to the aquatic environment, category acute 1 (H400) [1)]	Refers to the product's classification [5)]	0,1 – limit for *phase out*
	b)	Hazardous to the aquatic environment, category chronic 1 (H410) and 2 (H411) [1)]	Refers to the product's classification [5)]	0,1 – limit for *phase out*

c)	Hazardous to the aquatic environment, category chronic 4 (H413) [1)].	Refers to the product's classification [5)]	0,1 – limit for *phase out*

Notes

1) For information about H-phrases, concentration limits and specific classification limits: see ECHA's classification database "C & L Inventory", In those cases where there are specific classification limits for individual substance content, that is, higher or lower than the content limits specified under each criterion, these apply. This applies to both substances with harmonized classification and non-harmonized (self-classification). For PAHs in plastic or rubber components where exposure can occur by skin or mouth, the content limits apply in accordance to Reach EC 1907/2006 Annex XVII, entry 50. Granules or mulches for use as infill material in synthetic turf pitches or in loose form on playgrounds or in sport applications may not be registered if they contain more than 20 mg/kg (0,002 % by weight of the sum of all listed PAHs.

2) The criteria are not a substance criterion but apply to chemical products with the classification H304.

3) In accordance with criteria 9 there is a ban on mercury. The ban applies to articles where mercury has been used or added. Low concentrations of mercury that are not intentionally added in any stage thus fall outside the prohibition, but such traces/contamination of mercury should not exceed 2.5 mg/kg. Deviations exceeding 2.5 mg/kg are permitted in cases where they stem from natural occurrence in coal, ore or ore concentrate.

4) Hazardous to the ozon layer, criteria 11a: according to "Guidance on the Application of the CLP Criteria", a substance is defined as ozone depleting if ODP (Ozone Depletion Potential) is equal to or greater than 0.005. These known substances are listed in Annex I to Regulation (EC) No 1005/2009. Greenhouse gases, criterion 11b: See listed substances in Annex I to Regulation (EU) No 517/2014). See also the Swedish Chemicals Agency's PRIO guide with a searchable database for substances covered by the information requirement for PFAS.

5) Summation of the content of different substances with the same properties.

N.B.

The above criteria will be subdued to revision at intervals, in order to phase out substances with mentioned properties. Potential revisions may be made in order to adapt to new knowledge and to society's new demands and targets regarding chemical substances. The criteria will be harmonized according to changes in Regulation (EC) No. 1272/2008 (CLP) and Regulation (EC) no. 1907/2006 (REACH).

Hazard Statements used in these criteria

H300 Fatal if swallowed
H301 Toxic if swallowed
H304 May be fatal if swallowed and enters airways
H310 Fatal in contact with skin
H311 Toxic in contact with skin
H317 May cause an allergic skin reaction
H330 Fatal if inhaled
H331 Toxic if inhaled
H332 Harmful if inhaled
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
H336 May cause drowsiness or dizziness
H340 May cause genetic defects
H341 Suspected of causing genetic defects
H350 May cause cancer
H351 Suspected of causing cancer
H360 May damage fertility or the unborn child
H361 Suspected of damaging fertility or the unborn child
H362 May cause harm to breast-fed children
H370 Causes damage to organs
H371 May cause damage to organs
H372 Causes damage to organs through prolonged or repeated exposure
H373 May cause damage to organs through prolonged or repeated exposure
H400 Very toxic to aquatic life
H410 Very toxic to aquatic life with long lasting effects
H411 Toxic to aquatic life with long lasting effects
H412 Harmful to aquatic life with long lasting effects
H413 May cause long lasting harmful effects to aquatic life
H420 Harms public health and the environment by destroying ozone in the upper atmosphere
EUH380 May cause endocrine disruption in humans
EUH381 Suspected of causing endocrine disruption in humans
EUH430 May cause endocrine disruption in the environment
EUH431 Suspected of causing endocrine disruption in the environment
EUH440 Accumulates in the environment and living organisms including in humans
EUH441 Strongly accumulates in the environment and living organisms including humans
EUH450 Can cause long-lasting and diffuse contamination of water resources
EUH451 Can cause very long-lasting and diffuse contamination of water resources