

SAFETY DATA SHEET

ConProtect DB-50

(liquid)

Concrete impregnation

Date prepared: 2024

Revision date:

Version: 1

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

 Product name *ConProtect DB-50*

Relevant identified uses of the substance or mixture and uses advised against

 Relevant identified uses *For industrial use. Concrete.*

 Uses advised against *Use only in accordance with product specifications.*

Details of the Supplier of the Safety Data Sheet

 Name of the manufacturer *SL Protection OÜ*

 Address *Vana-Narva mnt 30, Maardu, 74114 Harju maakond, Estonia*

 E-mail *info@slprotection.eu*

 Phone/fax *+372 55666174*

 Emergency telephone number *Estonian National Poisons Information Centre: 16662 (+372 794 3794 from abroad) / Emergency telephone number: 112*

Emergency telephone - §45 - (EC)1272/2008

Europe	112
Estonia	16662 (24/7)
Finland	0800 147 111 (call is free of charge) +358 9 471 977
Austria	+43 (0)1 406 43 43
Bulgaria	+359 2 9154 233 (24/7)
Croatia	+385 1 2348 342 (24/7)
Czech Republic	+420 224 919 293 +420 224 915 402
Denmark	+45 8212 12 12
France	+33 (0)1 45 42 59 59 (24/7)
Greece	+30 2107793777 (24/7)
Iceland	543 2222 (24/7)
Ireland	+353 1 809 21 66 (8am-10pm; 7 days a week)
Italy	Numero telefonico del centro antiveleni: 0039 02-66101029
Latvia	+371 67042473
Lithuania	+370 (85) 2362052
Netherlands	Nationaal Vergiftigingen Informatie Centrum (NVIC): +31 (0)88 755 8000 Uitsluitend bestemd om professionele hulpverleners te informeren bij acute vergiftigingen
Norway	+47 22 59 13 00

Portugal	+351 800 250 250 (24/7)
Romania	+40213183606
Slovakia	+421 2 5477 4166
Slovenia	112
Spain	+34 91 562 04 20(24h/365 días), Únicamente para respuesta sanitaria en caso de urgencia
Sweden	+46 10 456 6700

2. HAZARDS IDENTIFICATION

Hazard Classification

Classification according to Regulation (EC) No 1272/2008 of the European Parliament and of the Council

EUH208 May produce an allergic reaction.
 EUH210 Safety data sheet available on request.

Label element

Hazard Symbol:



Signal Word: *Caution.*

Hazard Statement: *H302 Harmful if swallowed.
 H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.*

Precautionary Statements

*P262 Do not get in eyes, on skin, or on clothing.
 P305+ P351+ P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.*

Hazardous ingredients (labelling rules): *Not applicable.*

Supplemental label elements: *N/A*
 Special packaging requirements: *N/A*
 Child-resistant safety cap: *N/A*
 Embossed warning sign: *N/A*

Other hazards: *No other non-classified hazards.*

3. COMPOSITION/INFORMATION ON INGREDIENTS

Inorganic alkali dissolved in a liquid.

Substance Name: *Sodium Silicate*

CAS Number: 1344-09-8
EC Number: 215-687-4
REACH Number: 01-2119448725-31
Concentration of the ingredient: >40%

Classification of the ingredient according to Regulation (EC) No 1272/2008 of the European Parliament and of the Council:

Skin Sens. 1A H317
Eye Dam. 1, H319

4. FIRST AID MEASURES

General information: *Get medical attention if irritation or other symptoms occur. Before seeking medical attention, remove contaminated clothing and shoes. Take a copy of the Safety Data Sheet when going for medical treatment.*

Inhalation: *Remove the victim to fresh air. If necessary, consult a physician.*

Skin contact: *Wash the skin thoroughly with water and soap. Apply protective cream. Take off contaminated clothes. If the symptoms persist, call a doctor.*

Eye contact: *Rinse eyes immediately with eyewash solution or water (for 10 minutes). CONSULT AN OPHTHALMOLOGIST.*

Ingestion: *Rinse mouth and throat.
GET IMMEDIATE MEDICAL ADVICE/ATTENTION.*

Most important symptoms and effects, both acute and delayed

No data available.

Indication of any immediate medical attention and special treatment needed

*Quick removal of material is crucial.
Take off contaminated clothes immediately.*

Note to physician: Treatment should generally be symptomatic and aimed at alleviating the effects.

See Section 11 for more detailed information on health effects and symptoms. Indication of any immediate medical attention and special treatment needed.

5. FIREFIGHTING MEASURES

Extinguishing media

Suitable extinguishing media *Not relevant. Inorganic material. Non-combustible material, therefore, extinguishing media must be selected according to the surrounding environment.*

Unsuitable extinguishing media *None.*

Special hazards arising from the substance or mixture

Special hazards arising from the substance or mixture: *Minor fire hazard. The product is non-flammable.*

Hazardous combustion products: *None.*

Advice for firefighters: *None.*

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

*Avoid contact with skin and eyes.
Wear PVC protective gloves.
The leaked product is slippery.*

For non-emergency personnel: *Wet material makes the ground slippery.*
For emergency responders: *Wear relevant personal protective equipment.*

Environmental precautions: *Keep away from drains, surface and ground water. When containing with sand or other material, prevent the product from spreading into the environment. Inform respective authorities in case of leakage into water body or sewerage, or if the product has contaminated the ground.*

Methods and material for containment and cleaning up

Small/extensive leakage *Collect with liquid absorbing material, e.g. sand. Remove residues by rinsing the area with plenty of (warm) water. Liquid material can be removed with a vacuum cleaner.*

Reference to other sections *See Section 1 for emergency telephone numbers.
See Section 5 for firefighting measures.
See Section 8 for appropriate personal protective equipment.
See Section 12 for ecological information.
See Section 13 for waste disposal information.*

7. HANDLING AND STORAGE

Precautions for safe handling

*Avoid contact with eyes, skin or clothing.
Wear protective equipment, see also section 8.
Eye wash stations should be readily accessible.*

Conditions for safe storage, including any incompatibilities

*Keep packaging / storage container closed.
Protect from freezing.
Keep away from acids and metals.
Keep away from heat sources.*

Compatible materials: *(Stainless) steel.*

Incompatible materials: *Zinc, tin, aluminum, copper and alloys thereof.*

Storage class: *12 (non-flammable liquid).
See also section 10.
Observe all applicable local regulations during storage and handling.*

Further information for storage: *Store container in a well ventilated place.*

 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

 Occupational exposure limits *Regulation of the Government of the Republic of Estonia No. 105 (EE)*

 Exposure limit value: *None*
Derived No-Effect Level for workers:

Exposure	Route of exposure	Description	DNEL	The most sensitive endpoint
Long term - systemic effects	Dermal (mg/kg bw / day)	DNEL	1.59	Repeated dose toxicity
Long term - systemic effects	Inhalation (mg/m ³)	DNEL	5.61	Repeated dose toxicity

Derived No-Effect Level for consumers:

Exposure	Route of exposure	Description	DNEL	The most sensitive endpoint
Long term - systemic effects	Dermal route (mg/kg bw/day)	DNEL	0.8	Repeated dose toxicity
Long term - systemic effects	Inhalation (mg/m ³)	DNEL	1.38	Repeated dose toxicity
Long term - systemic effects	Ingestion (mg/kg bw/day)	DNEL	0.8	Repeated dose toxicity

Predicted No-Effect Concentration (PNEC)	mg/l
Freshwater	7.5
Sea water	1
Brackish water	7.5
Waste water treatment plant	348

Exposure controls
Exposure in the work place limited and controlled
General protection and hygiene measures:

*Observe standard industrial hygiene practices for the handling of chemical substances.
Do not eat, drink or smoke when handling.*

Personal protection equipment (PPE)
Respiratory protection: *Usually, general room ventilation is sufficient. Avoid inhalation of splashes.*
Eye protection: *Wear suitable tight fitting protective goggles with side shields*
Skin protection: *Avoid contact with skin. Wear trousers and a long-sleeved shirt. Wear chemically resistant rubber or plastic gloves.*

Exposure to the environment limited and controlled

Prevent material from entering surface waters, drains or sewers and soil.

 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties:

Appearance	<i>Viscous fluid, colourless to translucent liquid</i>
Odour:	<i>Odourless</i>
Odour threshold:	<i>N/A</i>
Melting point/freezing point:	<i>-1 °C</i>
Boiling point/boiling range:	<i>±100 °C</i>
Flash point:	<i>N/A</i>
Sustained combustibility:	<i>N/A</i>
Ignition temperature:	<i>N/A</i>
Lower explosion limit:	<i>N/A</i>
Upper explosion limit:	<i>N/A</i>
Vapour pressure:	<i>N/A</i>
Vapour pressure:	<i>N/A</i>
Density:	<i>N/A</i>
Relative density:	<i>1,20-1,60 kg/l</i>
Water solubility:	<i>Water-soluble</i>
pH:	<i>11-13</i>
Partition coefficient: n-octanol/water:	<i>N/A</i>
Viscosity:	<i>10 mPa.s - 30000 mPa.s</i>
Further information	<i>N/A</i>

T

 10. STABILITY AND REACTIVITY

General information: *Aqueous solutions react with aluminum, zinc, tin, copper and alloys thereof, releasing hydrogen gas, which may form an explosive mixture with air.*

Chemical stability:	<i>Stable under the recommended storage and handling conditions.</i>
Conditions to avoid:	<i>Moisture, heat, open flames, and other sources of ignition.</i>
Possibility of hazardous reactions	<i>Aqueous solutions react with aluminum, zinc, tin, copper and alloys thereof, releasing hydrogen gas, which may form an explosive mixture with air. Contact with acids gives exothermic reaction.</i>
Conditions to avoid	<i>Avoid contact with concentrated acids.</i>
Incompatible materials	<i>Avoid contact with aluminium, zinc, tin, copper and alloys thereof.</i>
Hazardous decomposition products	<i>None.</i>

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity

The hazards of sodium silicate for all routes of exposure are due to its alkalinity.

- **Ingestion:** *Oral LD50 (rat): 3400 mg/kg bw.*
- **Inhalation:** *After inhalation irritation of respiratory tract may be expected. LC50 (rat) > 2.06 g/m³*
- **Skin contact:** *Irritant Dermal LD50 (rat) > 5000 mg/kg bw.*
- **Eye contact:** *Causes serious eye damage, unless immediately treated.*

Skin corrosion/irritation	<i>Causes skin irritation.</i>
Serious eye damage/eye irritation	<i>Causes serious eye damage.</i>
Respiratory or skin sensitisation	<i>Not sensitising.</i>
Germ cell mutagenicity	<i>There is no evidence of genotoxicity. Negative in vitro and in vivo.</i>
Carcinogenicity	<i>There are no structural disorders.</i>
Reproductive toxicity	<i>Fertility effects: NOAEL (rat) > 159 mg/kg bw/day. Developmental toxicity: NOAEL (mouse) > 200 mg/kg bw/day.</i>
Specific target organ toxicity - single exposure	<i>N/A</i>
Specific target organ toxicity - repeated exposure	<i>N/A</i>
Aspiration hazard	<i>Not classified.</i>

12. ECOLOGICAL INFORMATION

Ecotoxicity

- *Acute toxicity to fish (Brachydanio rerio): LC50 (96 hours): 1108 mg/l.*
- *Acute toxicity to invertebrates (Daphnia magna): EC50 (48 hours): 1700 mg/l.*

- *Algae/cyanobacteria (Scenedesmus subspicatus): EC50 (72 h, biomass): 207 mg/l, EC50 (72 h, growth rate): > 345.4 mg/l.*

The product is not classified as environmentally hazardous according to the criteria of Regulation (EC) No 1272/2008.

Persistence and degradability

Inorganic. Soluble silicates, upon dissolution depolymerize rapidly into molecular particles that are indistinguishable from naturally dissolved silica. Combine with ions such as Ca, Mg, Fe, Al and others to form insoluble compounds similar to those found in natural soils as ingredients.

Bioaccumulation

Inorganic. This product is considered to be non-bioaccumulative.

Results of PBT and vPvB assessment N/A

Other adverse effects

The alkalinity of the material has a local effect on ecosystems sensitive to pH changes.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal methods *Dispose of in accordance with national or local regulations. It is recommended to neutralize the material before disposal. Dispose of contaminated packaging in accordance with national or local regulations. It is recommended to clean the packaging with water before disposal.*

EWC code: 06 02 99.

14. TRANSPORT INFORMATION

IMDG: N/A

UN No.: N/A

ICAO/IATA: N/A

Tremcard No.: N/A

GGVE/GGVS: N/A

RID/ADR: N/A

AD No.: N/A

D.O.T.: N/A

Other information There are no known restrictions. There are no legal requirements for the transport of this product.

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (CLP).

Estonian Chemicals Act (RT I 1998, 47, 697).

Regulation no. 105 of 17 January 2020 of the Government of the Republic of Estonia "Ohtlike kemikaalide ja neid sisaldavate materjalide kasutamise töötervishoiu ja tööohutuse nõuded ning töökeskkonna keemiliste ohutegurite piirnormid" (Occupational health and safety requirements for the use of hazardous chemicals and materials containing them and limit values for chemical hazards in the work environment).

Regulation No. 106 of 6 December 2000 of the Minister of Transport and Communications of Republic of Estonia „Nõuded kemikaali hoiukohale, peale-, maha- ja ümberlaadimiskohale ning teistele kemikaali käitlemiseks vajalikele ehitistele sadamas, autoterminalis, raudteejaamas ja lennujaamas ning erinõuded ammoniumnitraadi käitlemisele" (Requirements for Storage Facilities for and Places of Loading, Unloading and Transshipment of Chemicals, and for Other Structures Necessary for Handling of Chemicals in Ports, Road Transport Terminals, Railway Stations and Airports and special requirements for ammonium nitrate handling).

Waste Act (RT I 2004, 9, 52).

Regulation No. 102 of 6 April 2004 of Government of the Republic of Estonia „Jäätmete, sealhulgas ohtlike jäätmete nimistu" (List of waste, including hazardous waste).

Regulation No. 118 of 14 December 2001 of the Minister of Transport and Communications of the Republic of Estonia „Ohtlike veoste autoveo eeskiri" (Rules for the transport of dangerous goods by road).

Regulation (EC) No 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Substances of Very High Concern (SVHC) No ingredients are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles N/A

Other legislation

US legislation: not regulated

Right to Know Hazardous Substance List (RTKHSL): not regulated

Special Health Hazard Substance List (SHHSL): not regulated

This product is not on any controlled list.

Chemical safety assessment N/A

16. OTHER INFORMATION

Indication of changes: *Alignment of the safety data sheet with Commission Regulation (EU) No 453/2010; Section 1 - supplier; Section 2 - classification and labelling of the mixture in accordance with Regulation (EC) No 1272/2008; Section 3 - information on the ingredients and classification according to Regulation (EC) No 1272/2008; Section 11 - toxicological information; Section 15 - regulatory information.*

Full text of hazard categories and statements:

Skin Irrit. 2, H315 - *Skin irritation, Category 2, H315 Causes serious skin irritation.*

Eye Dam. 1, H318- *Serious eye damage Category 1, H318 Causes serious eye damage.*

Other information:

This safety data sheet summarizes the best knowledge we have at the time of issuing this safety data sheet about the health and safety risks of the product, and in particular about the safe handling and use of the product in the workplace. As SL Protection OÜ cannot foresee or control the conditions under which the product is used, each user must use the safety data sheet before using the product to find out how the product must be handled and used at the workplace.

If the user requires further explanation or additional information about the product, they should contact our company. Our liability regarding the sold product is defined by the standard terms and conditions, a copy of which has been sent to our customers and is also available on request.

Revision date 2024

Contact person / technical support contact:

SL Protection OÜ

Phone: +372 55666174

E-mail: info@slprotection.eu

Limitation of liability

For general safety and handling information, please contact SL Protection OÜ. This information is based on our experiences and best knowledge. There is no guarantee for any recommendations or advice. We are not responsible for the completeness or accuracy of this information.