



1. Product Identification

Trade Name: SILANE BHN

Description: Silicone complex based concrete and masonry water repellent treatment.

2. Composition / Information on Ingredients

Ingredient	CAS Number	Conc. (w/w)	Classification	R. Phrases
Trialkoxyisobutylsilane	17980-47-1	100%	Xi	38

3. Hazard Identification

Irritant. May cause irritation to the skin. Repeated exposure may cause skin dryness or cracking. May be harmful by inhalation and ingestion due to the release of ethanol by hydrolysis.

4. First Aid Measures

Inhalation: In case of drowsiness or sickness remove to fresh air, keep patient warm and at rest. If unconscious, turn to the recovery position. Seek medical assistance.

Skin Contact: Promptly remove contaminated clothing and wash the affected area with plenty of soap and water to ensure all traces of product are removed, then rinse thoroughly. Any contaminated clothing must be thoroughly cleaned before re-using. Seek medical advice if irritation persists.

Eye Contact: Flush with copious amounts of clean water for at least 15 minutes, with the eye lids held open. Seek medical attention.

Ingestion: Wash out mouth with water, have patient drink plenty of water in small sips. Keep patient at rest and obtain immediate medical attention. DO NOT INDUCE VOMITING.

Note to Physician: If required, therapy or irritative effect. After absorbing larger amount of substance: administration of activated charcoal, acceleration of the gastro-intestinal tract.

5. Fire Fighting Measures

Suitable Extinguisher Media: Alcohol-resistant foam, dry powder, carbon dioxide or water spray.

Unsuitable Extinguishing Media: Water jet.

Exposure Hazards: May give off toxic fumes if heated or involved in a fire, including carbon monoxide, carbon dioxide. Also ethanol in case of hydrolysis.

Special Protective Equipment: Full face, positive pressure, self-contained breathing apparatus and full protective clothing.

6. Accidental Release Measures

- Personal Precautions:** Wear protective equipment as specified in Section 8. Do not eat, drink or smoke. Avoid contact with skin and eyes. Avoid breathing vapours. Eliminate all ignition sources.
- Environmental Precautions:** Eliminate all ignition sources. Keep people and animals away. Prevent entry into drains, sewers and watercourses. If spillage enters drains leading to sewerage works inform the local water company. If spillage enters rivers or watercourses inform the Environment Agency.
- Spillages:** Cordon off area. Avoid sparks and open flames. Absorb/contain spillage using inert absorbent granules, sand or earth. Transfer collected material to heavy-duty plastic/steel drums and keep in a well ventilated place for subsequent safe disposal. See Section 13.

7. Handling and Storage

- Handling:** No specific precautions required when handling unopened containers; follow any relevant manual handling guidance. Refer to Sections 6 and 8 if exposure to product is possible. Take precautionary measures against static discharges. No smoking. Wash thoroughly with soap and water before eating, drinking or smoking, and after work
- Storage:** Keep containers tightly closed and store in a well ventilated area away from heat, sunlight, ignition sources or open flame. Protect from moisture.

8. Exposure Controls / Personal Protection

- Occupational Exposure Standards:** None known.
- Engineering Control Measures:** Refer to any applicable COSHH assessments. Engineering controls should be used where practicable in preference to personal protection and may include physical containment and good ventilation.
- Respiratory Protection:** If levels of vapour or aerosols occur use an approved respirator fitted with an appropriate gas cartridge (organic substance). All items must conform to EN149 and should be suitable for the levels of contamination present in the workplace.
- Hand Protection:** Wear Neoprene, Nitrile or PVC gloves or gauntlets. These must be manufactured to EN374. The material breakthrough time should be stated by the glove manufacturer, and must be observed at all times.
- Eye Protection:** If splashing of the product is likely chemical resistant goggles conforming to BS 2092 should be worn.

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Body Protection: Wear suitable impervious, chemical resistant overalls.

Foot Protection: Wear chemical resistant safety footwear.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

Appearance:	Clear liquid	Boiling Point:	186°C
Odour:	Characteristic	Vapour Pressure @ 25°C:	0.68hPa
pH:	N/D	Evaporation Rate (Butyl Acetate = 1):	N/D
Flash Point:	63°C	Flammable Limits in Air:	Upper: 8.47% Lower: 0.39%
Solubility:	Immiscible in water (decomposition by hydrolysis)	Autoignition Temperature:	N/D
Flammability:	Not classified as flammable		
Specific Gravity:	0.88		

10. Stability and Reactivity

Stability: Stable under normal conditions (see Section 7). Avoid heat, flames, sparks and moisture.

Materials to Avoid: Reacts strongly with oxidisers.

Hazardous Decomposition Products: Thermal decomposition may lead to the formation of a wide range of compounds, some of which may be hazardous, including carbon monoxide. Hydrolysis of the product results in the evolution of ethanol.

11. Toxicological Information

LD 50 (oral, rat): >5000mg/kg

LC 50 (inhal, rat): 5.88mg/litre/4 hours

LD50 (dermal, rat): 2000mg/kg

Inhalation: Possibly harmful (hydrolysis product, ethanol).

Skin Contact: Frequent or prolonged contact may cause irritation and cause dermatitis.

Eye Contact: Not irritating.

Ingestion: Possibly harmful (hydrolysis product, ethanol). Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause bronchopneumonia or pulmonary oedema.

12. Ecological Information

Elimination information (persistence and degradability)

Biodegradability: 75% readily biodegradable
Method: OECD 301 D (literature value)

Behaviour in environmental compartments

Ecotoxicity effects: Toxicity to fish: LC50 Oncorhynchus mykiss: 85 mg/l/96h
Method: EC 84/449 (literature value)
Toxicity to daphnia: EC50 Daphnia magna: >49.10mg/l/48h
Method: EC 84/449
Toxicity to algae: NOEC scenedesmus subspicatus: >=36mg/l/72h
Method: EC 88/302
Toxicity to Terrestrial
Plants: EC50 Trifolium ornithopadioides:
>100.00mg/kg/336h
Method: OECD 208
EC50 Lepidium sativum: >100.00mg/kg/336h
Method: OECD 208
EC50 Triticum aestivum: >100.00mg/kg/336h
Method: OECD 208
Toxicity in other Terrestrial
Non-mammals: LC50 foetida: >1000.00mg/kg/14d
Method: EC 88/302

13. Disposal Considerations

Dispose of unused product as hazardous waste, in accordance with all applicable local and national regulations, and in compliance with the Environmental Protection (Duty of Care) Regulations 1991.

Used containers should be drained thoroughly. After draining, vent in a safe place away from sparks and fire. Residues may cause an explosion hazard. Do not puncture, cut or weld uncleaned drums.

14. Transport Information

EU Classification and Labelling Particulars: Not classified as hazardous and therefore does not require labelling.

15. Regulatory Information

EU Classification and Labelling Particulars:

Designated Name: SILANE BHN

Classification: Irritant

Indication(s) of Danger: Xi

Risk and Safety Phrases:

R38: Irritating to skin.
S24: Avoid contact with the skin.

UK Guidance Publications: EH40; Occupational Exposure Limits, HSE. Revised annually.
EH26; Occupational Skin Diseases - Health and Safety Precautions, HSE.

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UK Legislation: Health and Safety at Work, etc Act, 1974, and relevant Statutory Provisions.
Control of Substances Hazardous to Health Regulations, 1999.
The Manual Handling Operations Regulations, 1992.
The Personal Protective Equipment at Work Regulations, 1992.
Chemicals (Hazard Information and Packaging for Supply) Regulations, 2002 - CHIP 3.

16. Other Information

Full Text of R-Phrases Referred to above:

R38: Irritating to skin.

Training Advice: Do not use unless trained to do so. Refer to the Technical Data Sheet for the product.

Recommended Uses: For professional use only. This product is designed for use as a silicone complex based concrete and masonry water repellent treatment.

Further Information: This Safety Data Sheet was compiled in accordance with EU Directives 67/548/EEC and 1999/45/EC. Reference was also made to the above legislation and guidance publications.

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MSDS Revised: 9th April, 2009

Changes in this Version: Section 11 revised to comply with current suppliers MSDS.

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Disclaimer: The information in this document is offered for general health and safety guidance only and is not intended to be a definitive source of advice, nor does it constitute a risk assessment, for which the user is responsible. All information provided in this document is believed to be accurate to the best of our knowledge. Users of the products referred to should observe the recommendations, conditions and instructions relating to any relevant product label, usage information, consent or approval in force at the time. Further and more specific information may be obtained from the supplier on request.

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