



SAFETY DATA SHEET

Section 1. Identification

Product Name: SB-4000
Chemical Name: Mixture
Synonyms: Water Repellent & Salt Blocker Invisible Penetrating Sealer

Supplier's Details: SEK-Surebond Corporation
3925 Stern Avenue
St. Charles, IL 60174
800-932-3343
www.sek.us.com

Emergency Telephone Number: CHEMTREC 800-424-9300 (United States Only)
Chemtrec (outside USA): (703) 527-3887

Section 2. Hazards Identification

Hazard Classification:

OSHA/HCS Status:

This product contains one or more chemicals considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Physical Hazards

None

Health Hazards

SKIN IRRITATION - Category 3

GHS Label Elements:

Hazard Pictograms: None

Signal Word: **WARNING**

Hazard Statements:

Causes mild skin irritation

Precautionary Statements:

Prevention:

Keep out of reach of children
Keep only in original container
Use only outdoors in a well ventilated area.
Wear protective gloves, clothing, face and eye protection
Wash thoroughly after handling

Response:

IF ON SKIN: Wash with plenty of soap and water. Get medical attention if irritation occurs.
Take off contaminated clothing and wash before reuse.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if eye irritation persists.

IN CASE OF FIRE: Use water, water fog, CO₂ or alcohol resistant foam to extinguish. Do NOT use dry chemical.

Storage:

Keep only in original packaging. Keep in a cool, well ventilated place. Do not allow to freeze.

Disposal:

Dispose of contents and container to appropriate waste site or reclaimer in accordance with all applicable laws, regulations, and product characteristics at time of disposal.

Other hazards:

May generate flammable hydrogen gas. Avoid contact with water, alcohols, acidic, basic or oxidizing materials.

Section 3. Composition/Information on Ingredients

Substance/Mixtures

Mixture

Chemical Nature:

Silicone emulsion

Other Means of Identification:

SB-4000 Water Repellent & Salt Blocker Invisible Penetrating Sealer

CAS number/other identifiers:

CAS Number: Mixture

| Chemical Name | CAS-No. | Concentration |
|----------------------|-----------|-------------------|
| Triethoxyoctylsilane | 2943-75-1 | 2 – 5 % by weight |

Section 4. First Aid Measures

Description of necessary first aid measures:

Inhalation:

Move to fresh air. If breathing stops, provide artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Skin Contact:

Wash thoroughly after handling. Remove contaminated clothing and shoes. Get medical attention if irritation persists. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.

Eye Contact:

Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses if present. Get medical attention if irritation persists.

Ingestion:

Call a physician or poison control center if you feel unwell. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person.

Most Important Symptoms/Effects, both acute and delayed:

Causes skin irritation.

Protection of First Aiders

First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists.

Notes to physician:

Treat symptomatically and supportively.

Section 5. Fire-fighting Measures

General Fire Hazards: Not Applicable

Extinguishing Media:

| | |
|---------------------------------|--|
| Suitable Extinguishing Media: | Alcohol-resistant foam Carbon Dioxide: CO2 Water Mist Water |
| Unsuitable Extinguishing Media: | Dry chemical |

Special hazards arising from the substance or mixture:

Exposure to combustion products may be a hazard to health. Applying foam will release significant amounts of hydrogen gas that can be trapped under the foam blanket.

Hazardous combustion products:

Carbon oxides
Silicon oxides
Formaldehyde

Specific extinguishing methods:

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Use water spray to cool unopened containers.
Do not allow extinguishing medium to contact container contents. Most fire extinguishing media will cause hydrogen evolution and once the fire is put out, may accumulate in poorly ventilated or confined areas and result in flash fire or explosion if ignited.
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Remove undamaged containers from fire area if it is safe to do so.
Evacuate area.

Special Protective Equipment for fire-fighters:

In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

Section 6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

Wear appropriate personal protective equipment.

Environmental Precautions:

Avoid release to the environment.

Methods and Materials for Containment and Cleaning Up

Absorb spill with vermiculite or other inert material, then place in a container for chemical waste.
Large spillages: Flush spill area with water spray. Prevent runoff from entering drains, sewers or streams. Dike for later disposal.

Notification Procedures:

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

Section 7. Handling and Storage

Precautions for safe handling:

Avoid breathing mist or vapors. Avoid contact with eyes, skin and clothing. Do not taste or swallow. Use only with adequate ventilation. Wash thoroughly after handling. Minimize exposure to air.

Conditions for Safe Storage, Including any Incompatibilities:

Keep container tightly closed and in a well-ventilated place. Store away from heat. Do not allow to freeze.

Storage stability:

Shelf life, use within: 24 months

Section 8. Exposure Controls/Personal Protection

Control Parameters

Occupational Exposure Limits

Contains no substances with occupational exposure limit values.

Hazardous components without workplace control parameters

| <u>Ingredients</u> | <u>CAS-No.</u> |
|-----------------------------|----------------|
| <i>Triethoxyoctylsilane</i> | 2943-75-1 |

Occupational exposure limits of decomposition products

| <u>Ingredients</u> | <u>CAS-No.</u> | <u>Value Type (form of exposure)</u> | <u>Control Parameters / Permissible Concentration</u> | <u>Basis</u> |
|--------------------|----------------|--------------------------------------|---|------------------------|
| <i>Ethanol</i> | 64-17-5 | TWA | 1000 ppm 1900 mg/m ³ | NIOSH REL, OSHA Z-1 |
| | | STEL | 1,000 ppm | ACGIH |

Exposure Controls:

Appropriate Engineering Controls:

Processing may form hazardous compounds (see section 10). Ensure adequate ventilation, especially in confined areas. Minimize workplace exposure concentrations.

Individual Protection Measures, Such As Personal Protective Equipment

Respiratory Protection:

General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

Eye/Face Protection:

Wear safety glasses with side shields (or goggles) and a face shield. Wear a full-face respirator, if needed.

Skin and Body Protection:

Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential.

Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc.)

Hygiene Measures:

Ensure that eye flushing systems and safety showers are located close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use. These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.

Section 9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance

| | |
|--------------------------------|--|
| Physical State: | Liquid |
| Color: | White |
| Odor: | Slight |
| Odor Threshold: | No data available |
| pH: | 5 - 7 |
| Melting Point/Freezing Point: | 0°C, estimated |
| Initial Boiling Point & Range: | 100° C |
| Flash Point: | 118° C, estimated Method: Seta closed cup |
| Evaporation Rate: | No data available |
| Flammability (solid, gas): | No data available |
| Upper Explosion Limit: | No data available |
| Lower Explosion Limit: | No data available |
| Vapor Pressure: | No data available |
| Relative Vapor Density: | No data available |
| Relative Density: | .95 – 1.05 |

| | |
|---|--|
| Solubility: | |
| Solubility in Water: | Dispersable |
| Partition coefficient (n-octanol/water): | No data available |
| Auto-ignition Temperature: | No data available |
| Thermal Decomposition: | No data available |
| Kinematic Viscosity: | <50 cSt |
| Explosive Properties: | Not explosive |
| Oxidizing Properties: | The substance or mixture is not classified as oxidizing. |
| Molecular Weight: | No data available |

Section 10. Stability and Reactivity

Reactivity:

Contact with water liberates highly flammable gases.

Chemical Stability:

Stable under normal conditions.

Possibility of Hazardous Reactions:

Use at elevated temperatures may form highly hazardous compounds. Can react with strong oxidizing agents. Product may evolve flammable hydrogen gas on contact with water, alcohols, acidic or basic materials, many metals or metallic compounds and can form explosive mixtures in air. When heated to temperatures above 150° C (300° F) in the presence of air, product can form formaldehyde vapors. Safe handling conditions may be maintained by keeping vapor concentrations within the occupational exposure limit for formaldehyde. Formaldehyde may cause cancer. It is also toxic by inhalation, skin absorption and ingestion, corrosive to skin and eyes, and may cause skin sensitization and respiratory irritation. See OSHA formaldehyde standard, 29 CFR 1910.1048. Hazardous decomposition products will be formed upon contact with water or humid air. Hazardous decomposition products will be formed at elevated temperatures.

Conditions to Avoid:

Exposure to moisture.

Incompatible Materials:

Oxidizing agents
Water

Hazardous Decomposition Products:

| | |
|----------------------------------|--------------|
| Contact with water or humid air: | Ethanol |
| Thermal Decomposition: | Formaldehyde |

Section 11. Toxicological Information

Likely Routes of Exposure

Inhalation

Ingestion
Skin Contact
Eye Contact

Acute Toxicity

Not classified based on available information.

Product:

Acute Oral Toxicity: Acute toxicity estimate: > 5,000 mg/kg (by calculation)

Ingredients:

Triethoxyoctylsilane:

Acute oral toxicity: LD50 (Rat): > 5,110 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity based on test data.

Acute dermal toxicity: LD50 (Rat): 6730 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity based on test data.

Skin Corrosion/Irritation

Product:

Causes skin irritation.

Ingredients:

Triethoxyoctylsilane:

Species: Rabbit

Result: Skin Irritation (based on test data)

Serious Eye Damage/Eye Irritation

Product:

Not classified based on available information.

Ingredients:

Triethoxyoctylsilane:

Species: Rabbit

Result: No eye irritation (based on test data)

Respiratory or Skin Sensitization

Respiratory Sensitization: Not classified based on available information.

Skin Sensitization: Not classified based on available information.

Germ Cell Mutagenicity

Not classified based on available information

Ingredients:

Triethoxyoctylsilane:

Genotoxicity in vitro:

Test Type: Mutagenicity (in vitro mammalian cytogenetic test)

Result: Negative

Remarks: Based on test data

Carcinogenicity

Not classified based on available information.

IARC No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated by NTP.

Reproductive Toxicity

Not classified based on available information.

Ingredients:

Triethoxyoctylsilane:

Effects on Fertility:

Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test.

Species: Rat, male and female

Application Route: Ingestion

Symptoms: No effects on fertility.

Remarks: Based on test data.

Effects on Fetal

Development:

Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test.

Species: Rat, male and female

Application Route: Ingestion

Symptoms: No effects on fetal development.

Remarks: Based on test data.

Reproductive Toxicity

Assessment:

No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.

STOT-single exposure

Not classified based on available information.

STOT-repeated exposure

Not classified based on available information.

Ingredients:

Triethoxyoctylsilane:

Routes of Exposure: Ingestion

Assessment: No significant health effects observed in animals at concentrations of 100 mg/kg bw or less.

Repeated Dose Toxicity

Ingredients:

Triethoxyoctylsilane:

Species: Rat

Application Route: Ingestion

Remarks: See reference to similar chemistry below in section 'Further Information'.

Aspiration Toxicity

Not classified based on available information.

Further Information

Triethoxyoctylsilane:

Remarks: Findings from a combined repeated-dose toxicity study with reproductive/developmental screening endpoints on n-octyltriethoxysilane have shown neurological effects in rats at high doses (1000 mg/kg). Paralysis and paresis of the limbs and demyelination of the brain, spinal cord, sciatic and tibial nerves was noted in some animals.

Section 12. Ecological Information

EcoToxicity

Acute Toxicity

Ingredients:

Triethoxyoctylsilane:

Toxicity to daphnia and

Other aquatic invertebrates: EC50 (Daphnia sp.): > 0.049 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Remarks: No toxicity at the limit of solubility

Toxicity to algae:

ErC50 (Pseudokirchneriella subcapitata (green algae)):
> 0.13 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
Remarks: No toxicity at the limit of solubility.

Persistence and degradability

Ingredients:

Triethoxyoctylsilane:

Biodegradability:

Result: Not readily biodegradable.
Biodegradation: 31.5 %
Method: OECD Test Guideline 301D
Remarks: Based on test data

Bioaccumulative potential

Ingredients:

Triethoxyoctylsilane:

Partition coefficient:

noctanol/water:

log Pow: 6.41
Method: OECD Test Guideline 117

Mobility in soil

No data available

Other adverse effects

No data available

Section 13. Disposal Considerations

Disposal methods

Resource Conservation and
Recovery Act (RCRA):

When a decision is made to discard this material as supplied, it is classified as a RCRA hazardous waste.

Waste Code:

D003: Reactivity

Waste from residues:

Dispose of in accordance with local regulations.

Contaminated Packaging:

Dispose of as unused product. Empty containers should be taken to an approved wasted handling site for recycling or disposal.

Section 14. Transport Information

International Regulation

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

Remarks : VENTED PACKAGES ARE FORBIDDEN FOR AIR TRANSPORT.

IMDG-Code

Not regulated as a dangerous good

Domestic regulation

49 CFR

Not regulated as a dangerous good

Section 15. Regulatory Information

EPCRA- Emergency Planning and Community Right-to-Know

SARA 311/312 Hazards: Acute Health Hazard

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US State Regulations

Pennsylvania Right to Know

| | | |
|---|------------|---------|
| Water | 7732-18-5 | > 90 % |
| Dimethyl, Methylhydrogen Siloxane, Trimethylsiloxy-terminated | 68037-59-2 | 2 - 4 % |
| Triethoxyoctylsilane | 2943-75-1 | 2 - 4 % |

New Jersey Right to Know

| | | |
|---|------------|---------|
| Water | 7732-18-5 | > 90 % |
| Dimethyl, Methylhydrogen Siloxane, Trimethylsiloxy-terminated | 68037-59-2 | 2 - 4 % |
| Triethoxyoctylsilane | 2943-75-1 | 2 - 4 % |
| Polyethylene oxide lauryl ether | 9002-92-0 | < 1.0 % |

California Prop 65 This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

The ingredients of this product are reported in the following inventories:

| | |
|--------|---|
| NZIoC: | All ingredients listed or exempt. |
| REACH: | All ingredients (pre-) registered or exempt. |
| TSCA: | All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances. |
| AICS: | All ingredients listed or exempt. |
| IECSC: | All ingredients listed or exempt. |
| KECI: | All ingredients listed, exempt or notified. |
| PICCS: | All ingredients listed or exempt. |
| DSL: | All ingredients listed or exempt. |

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

Section 16. Other Information

Full text of other abbreviations:

| | |
|----------------|---|
| ACGIH: | USA. ACIH Threshold Limit Values (TLV) |
| NIOSH REL: | USA. NIOSH Recommended Exposure Limits |
| OSHA Z-1: | USA. Occupational Exposure Limits (OSHA) – Table z-1 Limits for Air Contaminants |
| ACGIH/STEL: | Short-term exposure limit |
| NIOSH REL/TWA: | Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek |
| OSHA Z-1/TWA: | 8-hour time weighted average |
| STOT: | Specific target organ toxicity |

Date of Issue/Date of Revision: 1/19/2016

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