SB-150 NEUTRAL CURE SILICONE SEALANT

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

Product Name: **SB-150 NEUTRAL CURE SILICONE SEALANT**

Company Name: **SUREBOND**
3925 Stern Avenue
St. Charles, IL 60174
Phone: (877) 843-1818

Emergency Phone (24 hour): **CHEMTREC**
(800) 424-9300

Chemtrec (outside USA): (703) 527-3887

SECTION 2 - HAZARDS IDENTIFICATION

GHS CLASSIFICATION:
Skin sensitization – Category 1
Eye irritation – Category 2A
Carcinogenicity – Category 2
Specific Target Organ Toxicity-Repeated Exposure (Oral) – Category 2 (Blood)

GHS LABEL ELEMENTS:

Hazard symbols:

GHS07

GHS02

Signal word: Warning

Hazard statements:

- May cause an allergic skin reaction.
- Cause serious eye irritation.
- May cause damage to organs (blood) through prolonged or repeated exposure if swallowed.
- Suspected of causing cancer

PRECAUTIONARY STATEMENTS:

Prevention:

- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood.
- Do not breathe dust, fume, vapors or mist
- Wash hands and other skin areas thoroughly after handling
- Contaminated work clothing should not be allowed out of the workplace
- Wear protective gloves/protective clothing/eye protection/face protection.

Response:

- IF ON SKIN: wash with plenty of soap and water.
- IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
- IF EXPOSED OR CONCERNED: Get medical advice.
- Get medical advice if you feel unwell.
- IF SKIN IRRITATION OR RASH OCCURS: Get medical advice/attention.
- Specific treatment: Seek immediate medical advice. Refer to product label and Section 4 of this SDS.
- IF EYE IRRITATION PERSISTS: Get medical advice/attention.
- Wash contaminated clothing before reuse.

Storage: Store locked up.

Disposal: Dispose of contents/container in accordance with applicable local, regional, national and international regulations.

Other hazards: None known.

Supplemental information: No further information available.

CLASSIFICATION SYSTEM:

NFPA Ratings (scale 0 - 4)

Health = 2

Flammability = 1

Reactivity = 0

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

Ingredient Name	CAS Number	Concentration %
Silicone Dioxide	7631-86-9	5.0 – 10.0
Methyl Tri (methylethylketoxime) silane	22984-54-9	1.0 – 5.0
Vinyl Tri(methylethylketoxime)silane	2224-33-1	1.0 – 5.0
N-(3-(Trimethoxysilyl)propyl)ethylenediamine	1760-24-3	0.1 – 1.0
Methyltri(ethylmethylketoxime)silane isomers and oligomers	Not assigned	0.1 – 1.0
Pigmented sealants may contain:		
Carbon Black	1333-86-4	0.1 – 1.0
Titanium Dioxide	13463-67-7	0.1 – 1.0

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to the health or the environment and hence require reporting in this section.

SECTION 4 - FIRST AID MEASURES

Eye contact: Flush with copious quantities of lukewarm water for at least 15 minutes. Do not attempt to physically remove the solids or gums from the eye. Seek medical attention immediately if irritation persists.

Skin contact: Remove contaminated clothing. Wash thoroughly with warm water and non-abrasive soap. Seek medical attention if you feel ill or a reaction develops.

Inhalation: Remove to fresh air and provide water. Seek medical attention if you feel ill or a reaction develops.

Ingestion: Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.

Most important symptoms/effects, acute and delayed: May cause an allergic skin reaction. May cause serious eye irritation. May cause damage to organs through prolonged or repeated exposure if swallowed.

Indication of immediate medical attention and special treatment needed: Provide general supportive measures and treat symptomatically.

SECTION 5 - FIRE FIGHTING MEASURES

Suitable extinguishing media: Carbon dioxide, dry chemical, water fog or foam. Water can be used to cool fire exposed containers.

Unsuitable extinguishing media: None known.

Specific hazards arising from the chemical: Exposure to combustion products such as carbon oxides, silicone oxides and formaldehyde may be hazard to health.

Special protective equipment and precautions for fire fighters: Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Follow safe handling advice and personal protective equipment recommendations in Section 8.

Environment precautions: Discharged into the environment must be avoided. Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up: Restrict access to the area of the spill. Provide ventilation, NIOSH/MHSA approved respirator and protective clothing. Scrape up sealant and place in container for disposal. Clean area as appropriate since silicone materials can represent a slip hazard. Cleaning may require steam, solvents or detergents. Dispose of saturated absorbent or cleaning materials appropriately, since spontaneous heating may occur. Local, state, provincial, federal laws and regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup.

SECTION 7 - HANDLING AND STORAGE

Precautions for safe handling: Handle in accordance with good industrial hygiene and safety practice. Take care to prevent spills, waste and minimize release to the environment.

Conditions for safe storage, including any incompatibilities: Store in an adequately ventilated area under dry conditions between 50°F (10°C) to 77°F (25°C) and keep container tightly sealed when not in use. Do not store with strong oxidizing agents.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters:

Ingredient	CAS No.	Value Type (form of exposure)	Control parameters/ Permissible concentration	Basis
Silicone Dioxide	7631-86-9	TWA (Dust)	20 Million particles per cubic foot (Silica)	OSHA Z-3
		TWA (Dust)	80 mg/m^3/%SiO2 (Silica)	OSHA Z-3
		TWA	6 mg/m^3 (Silica)	NIOSH REL
Carbon Black	1333-86-4	TWA	3.5 mg/m^3	NIOSH REL
		TWA	3.5 mg/m^3	OSHA Z-1
		TWA (Inhalable fraction)	3 mg/m^3	ACGIH
Titanium Dioxide	13463-67-7	TWA	15 mg/m^3	OSHA PEL
		TWA	10 mg/m^3	ACGIH TLV

Hazardous components without workplace control parameters:

- Methyl Tri(methylethylketoxime)silane (CAS# 22984-54-9)
- Vinyl Tri(methylethylketoxime)silane (CAS# 2224-33-1)
- N-(3-(Trimethoxysilyl)propyl)ethylenediamine (CAS# 1760-24-3)
- Methyltri(ethylmethylketoxime)silane isomers and oligomers (CAS# Not assigned

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Occupational exposure limits of decomposition products:

Ingredient	CAS No.	Value Type (form of exposure)	Control parameters/ Permissible concentration	Basis
Methyl Ethyl Ketoxime	96-29-7	TWA	10 ppm	DCC OEL
	Further information: Skin sensitization			
		TWA	10 ppm	US WEEL

Engineering controls: Ensure adequate ventilation, especially in confined areas. Minimize workplace exposure concentrations. Wear an organic vapor NIOSH/MSHA approved respirator unless local exhaust ventilation is provided or exposures are within guidelines.

Personal protective equipment: Safety glasses with side-protection, impermeable gloves (e.g., neoprene, nitrile, silver shield (R)), coveralls or apron are important in preventing contamination of eyes, skin and clothing. Wash thoroughly after handling.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Paste, thixotropic sealant
Odor: Low odor
Odor threshold: Not available
pH (ASTM D1293): Not available
Melting point/Freezing point: Not available
Initial boiling point and boiling range: Not available
Flash point: Not applicable
Evaporation rate: Not available
Flammability (solid, gas): Not classified as a flammability hazard
Upper flammability or explosion limit: Not available
Lower flammability or explosion limit: Not available
Vapor pressure: Not applicable
Vapor density: Not available
Specific gravity: 1.04
Solubility: Not available
Partition coefficient: n-octanol/water: Not available
Auto-ignition temperature: Not available
Decomposition temperature: Not available
Viscosity: Not applicable
Volatile Organic Content: 26 grams per liter, <3% by weight (Chemically Curing Sealants and Caulks – CARB Method 310: VOC less water, less exempt compounds and LVP-VOCs).

SECTION 10 - STABILITY AND REACTIVITY

Reactivity: Not classified as a reactivity hazard.
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.
Conditions to avoid: Moisture and incompatible materials.

Incompatible materials: Strong oxidizing agents or electrophiles (e.g. ferric chloride). Concentrated acids or bases can degrade the silicone polymer.

Hazardous decomposition products: Carbon oxides, silicone dioxide, metal oxides, formaldehyde and traces of incompletely burned carbon products.

SECTION 11 - TOXICOLOGICAL INFORMATION

Information on the likely routes of exposure:

Inhalation: Prolonged inhalation may be harmful.
Ingestion: May be harmful if swallowed.
Skin contact: May cause skin irritation.
Eye contact: May cause serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics: May cause an allergic skin reaction. Suspected of causing cancer. Although the carbon black (CAS# 1333-86-4) is encapsulated by the silicone sealant, prolonged overexposure to carbon black dust causes lung fibrosis. Although the titanium dioxide (CAS# 13463-67-7) is encapsulated by the silicone sealant, prolonged overexposure to titanium dioxide dust causes tightness pain in the chest, coughing and difficulty breathing.

Acute toxicity:

Ingredient name	Result	Species	Dose	Exposure
Silicone Dioxide	LD50 Oral LC50 Inhalation LD50 Dermal	Rat Rat Rabbit	>3,300 mg/kg >2.08 mg/L >5,000 mg/kg	---- 4 hours ----
Methyltri(methylethylketoxime) silane	LD50 Oral LC50 Inhalation	Rat Rat	>2,520 mg/kg >4.8 mg/L	---- 4 hours ----
Vinyltri(methylethylketoxime) silane	LD50 Oral LD50 Dermal	Rat Rat	>2,000 mg/kg >2,000 mg/kg	---- ----
N-(3-Trimethoxysilyl)propyl)ethylenediamine	LD50 Oral LC50 Inhalation LD50 Dermal	Rat Rat Rabbit	2,295 mg/kg >1.49 mg/L >2,000 mg/kg	---- 4 hours ----
Carbon Black	LD50 Oral LC50 Inhalation	Rat Rat	>5,000 mg/kg >0.0046 mg/L	---- 4 hours
Titanium Dioxide	LD50 Oral LC50 Inhalation	Rat Rat	>5,000 mg/kg >6.82 mg/L	---- 4 hours

Skin corrosion/irritation: Not classified based on available information.

Serious eye damage/irritation: Causes serious eye irritation.

Aspiration hazard: No data available

Specific target organ toxicity – single exposure: Not classified based on available information.

Specific target organ toxicity – repeated exposure: May cause damage to organs (blood) through prolonged or repeated exposure if swallowed.

Respiratory or skin sensitization: Allergic skin sensitization through repeated direct contact with the ketoxime in the uncured sealant.

Carcinogenicity: No ingredients considered by IARC, NTP or OSHA to be carcinogens. Male rodents exposed to Methyl Ethyl Ketoxime (CAS# 96-29-7) vapor throughout their lifetime developed liver carcinomas. These carcinomas were statistically increased at a concentration of 374 ppm. Pigmented Sealants: carbon black (CAS# 1333-86-4) and titanium dioxide (CAS# 13463-67-7) are classified as IARC Group 2B – Possibly Carcinogenic to Humans.

Reproductive toxicity: Methyl Ethyl Ketoxime (CAS# 96-29-7) is not considered a reproductive or developmental toxin based on studies on rats.

Teratogenicity: No data available.

Germ-cell mutagenicity: Methyl Ethyl Ketoxime (CAS# 96-29-7) is not considered mutagenic or genotoxic based on in vivo and in vitro studies.

SECTION 12 - ECOLOGICAL INFORMATION

ECOTOXICITY:

Methyltri(methylethylketoxime)silane:

Toxicity to fish:	LC50 (Oncorhynchus mykiss (rainbow trout)): >120 mg/L, 96 hrs.
Toxicity to daphnia and other aquatic invertebrates:	EC50 (Daphnia magna (water flea)): >120 mg/L, 48 hrs.
Toxicity to algae:	ErC50 (Selenastrum capricornutum (green algae)): 94mg/L, 72 hrs.

N-(3-(Trimethoxysilyl)propyl)ethylenediamine:

Toxicity to fish:	LC50 (Danio rerio(zebra fish)): 597 mg/L, 96 hrs.
Toxicity to daphnia and other aquatic invertebrates:	EC50 (Daphnia sp.): 81 mg/L, 48 hrs.
Toxicity to algae:	ErC50 (Selenastrum capricornutum (green algae)): 8.8 mg/L, 72 hrs.
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):	NOEC (Daphnia sp.): >1 mg/L, 21 d.
Toxicity to bacteria:	EC50 (Pseudomonas putida): 67 mg/L, 16 hrs.

Titanium Dioxide:

Toxicity to fish:	LC50 (Oncorhynchus mykiss (rainbow trout)): >100 mg/L, 96 hrs.
Toxicity to daphnia and other aquatic invertebrates:	EC50 (Daphnia magna (water flea)): >100 mg/L, 48 hrs.
Toxicity to algae:	EC50 (Skeletonema costatum (marine diatom)): >10,000 mg/L, 72 hrs.
Toxicity to bacteria:	EC50: >1,000 mg/L, 3 hrs.

PERSISTENCE AND DEGRADABILITY:

Methyltri(methylethylketoxime)silane:

Biodegradability:	Not readily biodegradable Biodegradation: 14.5%, 21 days

Vinyltri(methylethylketoxime)silane:

Biodegradability:	Not readily biodegradable
Stability in water:	Degradation half life: 1s

N-(3-(Trimethoxysilyl)propyl)ethylenediamine:

Biodegradability: Not readily biodegradable
Biodegradation: 39%

Stability in water: Degradation half life: 0.025 hrs. (24.7°C) pH 7

BIOACCUMULATIVE POTENTIAL:

Methyltri(methylethylketoxime)silane:

Partition coefficient: n-octanol/water: log Pow: 11.2

N-(3-(Trimethoxysilyl)propyl)ethylenediamine:

Partition coefficient: n-octanol/water: log Pow: -0.3

Mobility in soil: No data available.

Other adverse effects: No data available.

SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal instructions: This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Dispose of contents/container in accordance with local, regional, national and international regulations.

Waste from residues: Dispose of in accordance with local regulations.

Contaminated packaging: Dispose of as unused product in a safe way. Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14 - TRANSPORT INFORMATION

Shipping Information: Not subject to DOT, TDG, IMDG Code or IATA Regulations.

SECTION 15 - REGULATORY INFORMATION

EPCRA – Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity:

Ingredients	CAS No.	Component RQ (lbs)	Calculated product RQ (lbs)
n-Hexane	110-54-3	5000	*
Methanol	67-56-1	5000	*
Ethylenediamine	107-15-3	5000	*

** Calculated RQ exceeds reasonably attainable upper limit.*

SARA 304 Extremely Hazardous Substances Reportable Quantity:

Ingredients	CAS No.	Component RQ (lbs)	Calculated product RQ (lbs)
Ethylenediamine	107-15-3	5000	*

** Calculated RQ exceeds reasonably attainable upper limit.*

SARA 311/312 Hazards: Acute Health Hazard, Chronic Health Hazard

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

SARA 313: This product does not contain any chemical components with known CAS No. that exceed the threshold reporting levels established by SARA Title III, Section 313.

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Pennsylvania Right To Know:

Dimethyl siloxane, hydroxy-terminated	70131-67-8	70 – 90%
Silicone dioxide	7631-86-9	5 – 10%
Methyl Tri(methylethylketoxime)silane	22984-54-9	1– 5%
Carbon black	1333-86-4	0.1 – 1%
Titanium dioxide	13463-67-7	0.1 – 1%

New Jersey Right To Know:

Dimethyl siloxane, hydroxy-terminated	70131-67-8	70 – 90%
Silicone dioxide	7631-86-9	5 – 10%
Methyl Tri(methylethylketoxime)silane	22984-54-9	1– 5%
Carbon black	1333-86-4	0.1 – 1%
Titanium dioxide	13463-67-7	0.1 – 1%
Dimethyl Siloxane, Trimethylsiloxy-terminated	63148-62-9	1– 5%

California Proposition 65: This product contains trace amount of substances, in the form of airborne or unbound particles, known to the State of California to cause cancer or other reproductive harm.

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

TSCA: All chemical substances in this product are included on or exempted from listing on the TSCA inventory of Chemical Substances.

DSL: All chemical substances in this product comply with the CEPA 1999 and NSNR and are on or exempted from listing on the Canadian Domestic Substances List (DSL).

NFPA Profile: Health 2, Flammability 1, Reactivity 0

SECTION 16 - OTHER INFORMATION

DISCLAIMER: The information contained herein is based on data available as of the date of preparation of this SDS and which we believe to be reliable. However, no warranty is expressed or implied regarding the accuracy of the data. We shall not be responsible for the use of this information, or of any product, method or apparatus mentioned. User must make his/her own investigation to determine the suitability of the information or products for his/her particular purpose, for the protection of the environment and the health and safety of the users of this material.