Revision Date: 11/14/16 Page 1 of 13



SAFETY DATA SHEET

Section 1. Identification

Product Name: SB-20 FlexBond Adhesive

Chemical Name: Mixture

General Description: Sealant/Adhesive

Physical Form: Paste
Color: Gray
Odor: Slight odor

NFPA PROFILE: Health 1 Flammability 1 Instability/Reactivity 0

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

Classification of the Substance or Mixture:

Classification (GHS)

Class	Category	Route of Exposure
Reproductive toxicity	Category 2 (developmental toxicity)	

GHS Label Elements:

Hazard Pictograms:





Signal Word: Warning

Revision Date: 11/14/16 Page 2 of 13

Hazard Statements:

H361d Suspected of damaging the unborn child.

Reportable Ingredients for Labeling:

Bis-trimethoxysilylpropylcarbamato-polypropylene glycol Polypropylene glycol Hydrophobic Silica Dioctyltin dilaurate

Other Hazards: Product hydrolyses produces methanol (CAS no. 67-56-1). Methanol is toxic by inhalation, in contact with skin and if swallowed. Methanol causes damage to organs. Methanol is highly flammable.

Precautionary Statements:

Prevention:

Keep out of reach of children. Wear protective gloves, protective clothing and eye protection.

Response:

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

If inhaled: Remove to fresh air. If not breathing give artificial respiration. If breathing is difficult give oxygen.

If on skin: Immediately flush skin with plenty of water for at least 15 minutes. Wash with soap and water.

If in eyes: Immediately hold eyelids apart and flush with plenty of water for at least 15 minutes. If swallowed: If conscious, give no more than two glasses of water but do not induce vomiting. If vomiting does occur, give additional fluids. Get medical attention immediately.

In case of fire: Use water mist, carbon dioxide, dry chemical or alcohol resistant foam.

Storage:

Store in temperatures between 35° and 90° F recommended

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.

Hazards not otherwise classified:

Product hydrolyzes producing methanol (CAS no. 67-56-1). Methanol is toxic by inhalation, in contact with skin and if swallowed. Methanol causes damage to organs. Methanol is highly flammable.

Revision Date: 11/14/16 Page 3 of 13

Section 3. Composition/Information on Ingredients

Chemical Characteristics: Silane-terminated polyether + filler +auxiliary.

Information on Ingredients:

TYPE	CAS NO.	SUBSTANCE	Content (wt. %)		Note
			Lower	Upper	
INHA	2768-02-07	Trimethoxy vinylsilane		<2.0	
INHA	13822-56-5	3-(trimethoxysilyl)		<2.0	
		propylamine			
VERA	14808-60-07	Quartz		<0.3	C1, C2
INHA	3648-18-8	Dioctyltin dilaurate	>0.1	<0.2	R

Type: HYD - by-product upon hydrolysis, INHA – ingredient, NEBE – by-product, MONO – residual monomer, VERA – impurity, VUL – by-product upon vulcanization. ***NOTE: C1 – IARC carcinogen, C2 – NTP carcinogen, C3 – OSHA carcinogen, NH – non-hazardous, R – reproductive toxin.

Substances listed in the Subsections "HAPS" and "California Proposition 65 Carcinogens / Reproductive Toxins" that are not listed in this section are only present at quantities below 0.1% for California Proposition 65 listed toxins or below 1% for non-carcinogenic HAPS or they are inextricably bound in the product.

Section 4. First Aid Measures

General Information:

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

If Inhaled:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult give oxygen.

If on Skin:

Immediately flush skin with plenty of water for at least 15 min. Wash with soap and water.

If in Eyes:

Immediately hold eyelids apart and flush with plenty of water for at least 15 min.

Revision Date: 11/14/16 Page 4 of 13

If Swallowed:

If conscious, give no more than two glasses of water but do not induce vomiting. If vomiting does occur, give additional fluids. Get medical attention immediately.

Advice for the Physician:

Methanol (CAS 67-56-1) is readily and rapidly absorbed at all exposure routes and is toxic by all routes. Methanol may cause irritation of the mucosa, as well as nausea, vomiting, headaches, vertigo and visual disorders, including blindness (irreversible damage to the optic nerve), acidosis, spasms, narcosis and coma. There may be a delay in the onset of these effects after exposure.

Section 5. Firefighting Measures

Flammable Properties: Method

Flash point: > 200°C (>392°F) (ISO 2692)

Boiling point/boiling range: Not Applicable Lower explosion limit (LEL): Not Determined Ignition temperature: Not Determined

Fire and Explosion Hazards:

Material supports combustion. This material will burn with a lazy smoldering flame. Hydrolyzes on contact with moisture releasing ignitable, toxic vapors. Vapors are heavier than air and may travel along the ground, be moved by ventilation systems, settle in pits or low areas, and be ignited by ignition sources distant from the handling point. Never use welding or cutting torch on or near any container of this material, even if empty, because an explosion could occur.

Recommended Extinguishing Media:

Water mist, carbon dioxide, dry chemical or alcohol resistant foam.

Unsuitable Extinguishing Media:

Sharp water jet.

Special Exposure Hazards Arising From the Substance or Preparation Itself, Combustion Products, Resulting Gases:

Hazardous decomposition products: carbon dioxide, carbon monoxide, formaldehyde, silicon dioxide, nitrogen oxides and incompletely burnt hydrocarbons.

Fire Fighting Procedures:

Cool endangered containers with water. Fire fighters should wear full protective clothing including a self-contained breathing apparatus.

Revision Date: 11/14/16 Page 5 of 13

Section 6. Accidental Release Measures

Precautions:

Wear personal protection equipment (see section 8). Keep unprotected persons away. Avoid contact with eyes and skin. Avoid inhaling mists and vapors.

HAZWOPER PPE Level:

Level D

Containment:

Prevent material from entering surface waters, drains or sewers and soil. Contain any fluid that runs out using suitable material (e.g. earth). Retain contaminated water/extinguishing water. Dispose of in prescribed marked containers. Spills of material which could reach surface waters must be reported to the United States Coast Guard National Response Center's toll free number (800) 424-8802.

Methods for Cleaning Up:

Do not flush away with water. For small amounts: Absorb with a liquid binding material such as diatomaceous earth and dispose of according to local/state/federal regulations. Contain larger amounts and pump up into suitable containers. Clean any slippery coating that remains using a detergent/soap solution or another biodegradable cleaner. Exhaust vapors.

Section 7. Handling and Storage

Precautions for Safe Handling:

Ensure adequate ventilation. Keep away from incompatible substances in accordance with section 10.

Precautions against Fire and Explosion:

Product can separate producing methanol. Flammable vapors may accumulate and form explosive mixtures with air in containers, process vessels, including partial, empty and uncleaned containers and vessels, or other enclosed spaces. Keep away from sources of ignition and do not smoke. Take precautionary measures against electrostatic charging.

Conditions for Storage Rooms and Vessels:

Make sure there is no possibility of entering the ground.

Advice for Storage of Incompatible Materials:

Not applicable

Further Information for Storage:

Protect against moisture. Store in original container only. Keep container tightly closed and store in a cool, well ventilated place.

Revision Date: 11/14/16 Page 6 of 13

Section 8. Exposure Controls/Personal Protection

Engineering Controls:

Ventilation:

It is recommended to use with adequate ventilation.

Local Exhaust:

In case of potential decomposition products: Local exhaust ventilation which meets the requirements of ANSI Z9.2 is recommended to control airborne containments at the point of use. (to maintain concentration below TLV).

Associated Substances with Specific Control Parameters Such As Limit Values, Maximum Airborne Concentrations At The Workplace:

CAS No.	Material	Type	mg/m³	ppm	Dust Fract.
67-56-1	Methanol	OSHA PEL	260.0	200.0	
67-56-1	Methanol	ACGIH TWA		200.0	

Re Methanol (CAS-no. 67-56-1): STEL is 250 ppm, skin notation (ACGIH); STEL is 250 ppm, skin notation (NIOSH).

Personal Protection Equipment (PPE):

Respiratory Protection:

Respiratory protection is not normally required. A NIOSH approved air purifying respirator equipped with universal multi-containment, multi –gas/vapor cartridges and at least P-99 solid/aerosol particulate filters is recommended if overexposure to dusts, mists, or vapors could occur.

Hand Protection:

Any liquid-tight rubber or vinyl rubber protective gloves.

Eye Protection:

Safety glasses with side shields. Additional eye and face protection, splash-proof goggles, hood, full-faced respirator, or face shield is recommended if splashing occurs.

Other Protective Clothing or Equipment:

Additional protective clothing or equipment is not normally required. Provide eye bath and safety shower.

Revision Date: 11/14/16 Page 7 of 13

General Hygiene and Protection Measures:

Avoid contact with eyes, skin and clothing. Avoid breathing dust/vapor/mist/gas/aerosol. Do not eat, drink or smoke when handling. Follow standard industrial hygiene practices when using this material. Wash thoroughly after handling.

Section 9. Physical and Chemical Properties

<u>Information on Basic Physical and Chemical Properties:</u>

Appearance:

Physical State/Form: Paste
Color: Gray
Odor: Mild

Safety Parameters: METHOD:

Melting point/melting range: not applicable Boiling point/boiling range: not applicable

Flash point: >200°C (>392°F) (ISO 2592)

Ignition temperature:

Lower explosion limit (LEL):

Vapor pressure:

Density:

Water solubility/miscibility:

pH-Value:

not determined
not applicable
not applicable
not applicable

VOC Content: 26 grams per liter

Viscosity (dynamic): 600,000 cps. at 23°C (73°F) (BROOKFIELD)

Explosion limits for released methanol: 5.5 - 44% (V).

Section 10. Stability and Reactivity

General Information:

If stored and handled in accordance with standard industrial practices no hazardous reactions are known.

Conditions to Avoid:

Moisture

Materials to Avoid:

Reacts with: water. Reaction causes the formation of: methanol.

Hazardous Decomposition Products:

Under effect of humidity, water & protic agents: methanol

Revision Date: 11/14/16 Page 8 of 13

Further Information:

Hazardous polymerization cannot occur.

Section 11. Toxicological Information

General Information:

Data derived for the product as a whole are of higher priority than data for single ingredients.

Acute Toxicity

Product Details:

Route Of Exposure	Result/Effect	Species/Test System	Source
Oral	LD50:>2000 mg/kg	Rat	Conclusion by analogy
Dermal	LD50:>2000 mg/kg	Rat	Conclusion by analogy

Skin Corrosion/Irritation:

Assessment:

Based on the available data a clinically relevant skin irritation hazard is not expected. Temporary symptoms of an irritation cannot be excluded if the adhesive product is removed mechanically after contact.

Product Details:

Route Of Exposure	Result/Effect	Species/Test System	Source
Not irritating		Rabbit	Conclusion by analogy

Serious Eye Damage / Eye Irritation

Assessment:

Based on the available data a clinically relevant eye irritation hazard is not expected. Temporary symptoms of an irritation cannot be excluded if the adhesive product is removed mechanically after contact.

Product Details:

Route Of Exposure	Result/Effect	Species/Test System	Source
Not irritating		Rabbit	Conclusion by analogy

Revision Date: 11/14/16 Page 9 of 13

Respiratory or Skin Sensitization

Product Details:

Route Of Exposure	Result/Effect	Species/Test System	Source
Dermal	Not sensitizing	Guinea-pig; Buhler	Conclusion by analogy
			OECD 406

Germ Cell Mutagenicity

Assessment:

For this endpoint no toxicological test data is available for the whole product.

Carcinogenicity

Assessment:

For this endpoint no toxicological test data is available for the whole product.

Reproductive Toxicity

Assessment:

For this endpoint no toxicological test data is available for the whole product.

Specific Target Organ Toxicity (Single Exposure)

Assessment:

For this endpoint no toxicological test data is available for the whole product.

Specific Target Organ Toxicity (Repeated Exposure)

Assessment:

For this endpoint no toxicological test data is available for the whole product.

Aspiration Hazard

Assessment:

Based on the physical – chemical properties of the product no aspiration hazard should be expected.

Further Toxicological Information

Quartz has been classified by IARC as carcinogen group 1 ("carcinogen to humans") and by NTP as known to be human carcinogen. No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Data Related To Ingredients:

Product of Hydrolysis (Methanol)

Methanol (CAS 67-56-1) is readily and rapidly absorbed at all exposure routes and is toxic by all routes. Methanol may cause irritation of the mucosa, as well as nausea, vomiting, headaches,

Revision Date: 11/14/16 Page 10 of 13

vertigo and visual orders, including blindness (irreversible damage to the optic nerve), acidosis, spasms, narcosis and coma. There may be a delay in the onset of these effects after exposure.

Section 12. Ecological Information

Toxicity

Assessment:

Assessment based on Eco toxicological tests with similar products under consideration of the physical-chemical properties: For this product no effects on aquatic organisms, relevant or classification, are expected. According to current knowledge adverse effects on water purification plants are not expected.

Persistence and Degradability

Assessment:

Silicone content: Biologically not degradable. Separation by sedimentation.

<u>Data Related To Ingredients:</u>

Product of Hydrolysis (Methanol)

The product of hydrolysis (methanol) is readily biodegradable.

Bioaccumulative Potential

Assessment:

No data known.

Mobility In Soil:

Assessment:

No data known.

Other Adverse Effects:

Assessment:

No data known

Section 13. Disposal Considerations

Product Disposal

Recommendation:

Material that cannot be used, reprocessed or recycled should be disposed of in accordance with federal, state and local regulations at an approved facility. Depending on the regulations, waste treatment methods may include, e.g., landfill or incineration.

Revision Date: 11/14/16 Page 11 of 13

Packaging Disposal

Recommendation:

Completely discharge containers may be recycled or re-used. Observe local/state/federal regulations. Uncleaned packaging should be treated with the same precautions as the material.

Section 14. Transport Information

US DOT & CANADA TDG SURFACE:

Valuation: Not regulated for transport

Transport by Sea IMDG-Code:

Valuation: Not regulated for transport

Air Transport ICAO-TI/IATA-DGR:

Valuation: Not regulated for transport

Section 15. Regulatory Information

U.S. Federal Regulations

TSCA Inventory Status and TSCA Information:

This material or its components are listed on or are in compliance with the requirements of the TSCA Chemical Substance Inventory.

TSCA 12(b) Export Notification:

This material does not contain any TSCA 12(b) regulated chemicals.

CERCLA Regulated Chemicals:

This material does not contain any CERCLA regulated chemicals.

SARA 302 EHS Chemicals:

This material does not contain any SARA extremely hazardous substances.

SARA 311/312 Hazard Class:

This product does not present any SARA 311/312 hazards.

SARA 313 Chemicals:

This material does not contain any SARA 313 chemicals above the minimum levels.

Revision Date: 11/14/16 Page 12 of 13

HAPS (Hazardous Air Pollutants):

CAS No.	Chemical	Upper Limit Wt. %
67-56-1	Methanol	0.1477
68-12-2	N, N-Dimethlyformamide	0.0004

U.S. State Regulations

California Proposition 65 Carcinogens:

14808-60-7 Quartz

California Proposition 65 Reproductive Toxins:

67-56-1 Methanol

Massachusetts Substance List:

1317-65-3 Calcium carbonate, 14808-60-7 Quartz

New Jersey Right-to-Know Hazardous Substance List:

14808-60-7 Quartz

Pennsylvania Right-to-Know Hazardous Substance List:

1317-65-3 Calcium Carbonate 14808-60-7 Quartz

Canadian Regulations:

This product has been classified in accordance with the Hazard criteria of the CPR and the SDS contains all the information required by the CPR.

WHMIS Hazard Classes:

None.

DSL Status:

This material or one or more of its components is not listed on the Canadian Domestic Substances List.

Canadian Ingredient Disclosure List:

14808-60-07 Quartz

Revision Date: 11/14/16 Page 13 of 13

Section 16. Other Information

Revision Information: Not relevant.

Key Literature References

and Sources for Data: No data available.

Training Information: No data available.

Date of Issue/Date of Revision: 11/14/16

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