



SAFETY DATA SHEET

BIOTHERM™ 100

Elastomeric, silicone firestop sealant

SECTION 1 – PRODUCT AND COMPANY INFORMATION

Product Name
Biotherm™ 100 Firestop Sealant

Product Codes
66535, 66449

Chemical Family
Organic/Inorganic

Use
Firestopping sealant

Manufacturer's Name
The RectorSeal Corporation
2601 Spenwick Drive
Houston, Texas 77055 USA

Date of Validation
September 17, 2015

Date of Preparation
September 17, 2015

HMIS Codes
Health 2
Flammability 0
Reactivity 0
PPI B

Emergency Telephone No.
Chemtrec 24 Hours
(800)-424-9300 USA
(703)-527-3887 International

Technical Service Telephone No.
(800)-231-3345 or (713)-263-8001

SECTION 2 – HAZARDS IDENTIFICATION

GHS CLASSIFICATION

Physical Hazards:

None

Health Hazards

Eye irritation – Category 2B
Skin irritation – Category 2
Skin sensitization – Category 1B
Carcinogenicity – Category 2

ENVIRONMENTAL HAZARDS

Hazardous to the Aquatic Environment: Not Classified
Acute aquatic toxicity: Not Classified
Chronic aquatic toxicity: Not Classified
Bioaccumulation potential: Not Classified
Rapid degradability: Not Classified

GHS Label elements, including precautionary statements



GHS08: Health Hazard
Signal Word: **Warning**

Hazard Statements:

- H315 - Causes skin irritation.
- H317 - May cause an allergic skin reaction.
- H319 - Causes eye irritation.
- H351 - Suspected of causing cancer.

Precautionary Statements:

- P201 - Obtain special instructions before use.
- P202 - Do not handle until all safety precautions have been read and understood.
- P261 - Avoid breathing dust, fume or vapors.
- P262 - Do not get in eyes, on skin or on clothing.
- P264 - Wash hands and other skin areas thoroughly after handling.
- P271 - Use only outdoors or in a well-ventilated area.
- P272 - Contaminated work clothing should not be allowed out of the workplace.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- P302+P352+P333+P313 If on skin: wash with plenty of soap and water.If skin irritation or rash occurs, get medical attention.
- P305+P351+P338 If in eyes: rinse with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
- P308+P313 If exposed or concerned: Get medical advice/attention.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P321 Specific treatment: Seek immediate medical advice. Refer to product label and Section 4 of this SDS.
- P362 Take off contaminated clothing and wash it before reuse.

Storage: P405+P403 Store locked up. Store in a well-ventilated place.

Disposal: P501 Dispose of contents and container in accordance with applicable local, regional, national and international regulations.

Summary Of Acute Hazards

May cause skin/eye irritation and an allergic skin reaction.

Route Of Exposure, Signs And Symptoms

INHALATION

Not known to be a respiratory irritant. Prolonged inhalation may be harmful.

EYE CONTACT

Contact may cause eye irritation.

SKIN CONTACT

Contact may cause skin irritation.

INGESTION

Possible irritation to mucous membranes of the mouth, throat, and stomach.

SUMMARY OF CHRONIC HAZARDS

None known.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Persons with pre-existing skin conditions or chemical allergies may be more susceptible to contact effects of the cured elastomer.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient:	Amorphous Silica
Percentage by weight:	3-7
CAS Number:	7631-86-9
EC#:	231-545-4
Ingredient:	Ketoxime Silane
Percentage by weight:	3-7
CAS Number:	22984-54-9
EC#:	--
Ingredient:	Calcium Carbonate
Percentage by weight:	15-40
CAS Number:	1317-65-3
EC#:	215-279-6
Ingredient:	Carbon Black
Percentage by weight:	0.1-1.0
CAS Number:	1317-65-3
EC#:	215-609-9
Ingredient:	Titanium Dioxide
Percentage by weight:	0.1-1.0
CAS Number:	13463-67-7
EC#:	236-675-5

SECTION 4 – FIRST AID MEASURES

If inhaled:	Not a respiratory irritant.
If on skin:	Wash with soap and water. If irritation occurs, seek medical attention.
If in eyes:	Immediately flush with large amounts of water. If irritation occurs, seek medical attention.
If swallowed:	If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

SECTION 5 – FIRE FIGHTING MEASURES

Extinguishing Media

Foam, dry chemical, carbon dioxide or water fog.

Special Fire Fighting Procedures: Wear self-contained breathing apparatus (SCBA) and other protective clothing. Hazardous decomposition products possible (see Section 10).

Unusual Fire And Explosion Hazards: Heat may build up and rupture closed containers.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Steps To Be Taken In Case Material Is Released Or Spilled: Wipe up spills to prevent footing hazard. Avoid flushing into sewers, drains, waterways and soil. Wear protective clothing during clean up.

SECTION 7 – HANDLING AND STORAGE

Precautions To Be Taken In Handling And Storing: Keep container closed and upright when not in use. To prevent freezing and possible rupture of container, do not store below 35°F.

Other Precautions: Avoid prolonged or repeated contact with skin or clothing. Empty containers may contain residues and vapors; treat as if full and observe all product precautions. Do not reuse empty containers.

KEEP OUT OF REACH OF CHILDREN.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredient	Units
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Amorphous Silica

ACGIH TLV:	N/D ppm
OSHA PEL:	N/D ppm

Ketoxime Silane

ACGIH TLV:	N/D ppm
OSHA PEL:	N/D ppm

Calcium Carbonate

ACGIH TLV:	10 mg/m3
OSHA PEL:	15 mg/m3

Carbon Black

ACGIH TLV:	3.5 mg/m3
OSHA PEL:	3.5 mg/m3

Respiratory Protection (Specify Type): None required.

Ventilation – Local Exhaust: Acceptable.

Special: N/A

Mechanical (General): Preferable.

Other: N/A

Protective Gloves: Wear rubber gloves.

Eye Protection: Safety glasses (ANSI Z-87.1 or equivalent)

Other Protective Clothing Or Equipment: Coveralls recommended.

Work/Hygienic Practices: Where use can result in skin contact, wash exposed areas thoroughly before eating, drinking, smoking, or leaving work area. Launder contaminated clothing before reuse.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Boiling point:	Not available
Specific gravity (H ₂ O = 1):	1.31-1.33
Vapor pressure (mmHg):	Less than 5 mm Hg
Melting point:	N/A
Vapor Density (Air = 1):	N/A
Evaporation rate (Ethyl Acetate = 1):	> 1
Appearance/Odor:	Viscous liquid, smooth self-leveling sealant
Solubility in water:	Not available
Volatile Organic Compounds (VOC) Content	25 grams per liter, < 3% by weight (Chemically Curing Sealants and Caulks – CARB Method 310: VOC less water, less exempt compounds and LVP-VOCs)
Flash point:	None
Lower explosion limit:	None
Upper explosion limit:	None

SECTION 10 – STABILITY AND REACTIVITY

Stability: Stable

Conditions To Avoid: None.

Incompatibility (Materials To Avoid): None known.

Hazardous Decomposition Products: CO, CO₂ and fragmented hydrocarbons.

Hazardous Polymerization: Will not occur.

SECTION 11 – TOXICOLOGY INFORMATION

Chronic Health Hazards

No ingredient in this product is an IARC, NTP or OSHA listed carcinogen. 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. The curing vapor, Methyl Ethyl Ketoxime (CAS# 96-29-7), may cause drowsiness, injure blood, liver and may irritate or harm nose, throat, lungs and eyes. Direct contact with eyes will irritate. Direct contact with skin may irritate.

Toxicology Data

Ingredient Name

Amorphous Silica	
Oral-Rat LD50:	22,500 mg/kg
Inhalation-Rat LC50:	N/D
Ketoxime Silane	
Oral-Rat LD50:	N/D
Inhalation-Rat LC50:	N/D
Calcium Carbonate	
Oral-Rat LD50:	N/D
Inhalation-Rat LC50:	N/D
Carbon Black	
Oral-Rat LD50:	> 5,000 mg/kg
Inhalation-Rat LC50:	> 0.0046 mg/L
Titanium Dioxide	
Oral-Rat LD50:	> 5,000 mg/kg
Inhalation-Rat LC50:	> 6.82 mg/L

SECTION 12 – ECOLOGICAL INFORMATION

Ecological Data

Ingredient Name:	Ketoxime Silane
Toxicity to fish:	LC50 (<i>Oncorhynchus mykiss</i> (rainbow trout)): > 120 mg/L, 96 hrs.
Toxicity to daphnia and other aquatic invertebrates:	EC50 (<i>Daphnia magna</i> (water flea)): > 120 mg/L, 48 hrs.
Ingredient Name:	Carbon Black
Toxicity to fish:	LC50 (<i>Danio rerio</i> (zebra fish)): > 1,000 mg/L, 96 hrs.
Toxicity to daphnia and other aquatic invertebrates:	EC50 (<i>Daphnia magna</i> (water flea)): > 5,600 mg/L, 24 hrs.
Toxicity to algae:	NOEC (<i>Desmodesmus subspicatus</i> (green algae)): 10,000 mg/L, 72 hrs.

Ecological Data (cont.)

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

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste Classification: Non-regulated solid waste

Disposal Method: Approved landfill

Waste from this product is not considered hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Dispose of in accordance with Federal, State, and Local regulation regarding pollution.

SECTION 14 – TRANSPORTATION INFORMATION

DOT:	Non-regulated
Ocean (IMDG):	Non-regulated
Air (IATA):	Non-regulated
WHMIS (Canada):	Non-regulated

SECTION 15 – REGULATORY INFORMATION

Regulatory Data

Ingredient Name:	Amorphous Silica
SARA 313	N/A
TSCA Inventory	Yes
CERCLA RQ	N/A
RCRA Code	N/A

Ingredient Name:	Ketoxime Silane
SARA 313	N/A
TSCA Inventory	Yes
CERCLA RQ	N/A
RCRA Code	N/A

Ingredient Name: **Carbon Black**

SARA 313 N/A

TSCA Inventory Yes

CERCLA RQ N/A

RCRA Code N/A

Ingredient Name: **Titanium Dioxide**

SARA 313 N/A

TSCA Inventory Yes

CERCLA RQ N/A

RCRA Code N/A

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.

SECTION 16 – OTHER INFORMATION

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). The information herein is given in good faith, but no warranty, expressed or implied is made.

Consult RectorSeal for further information: (713) 263-8001