

Safety Data Sheet

Section I. Chemical Product and Company Identification

Product Identifier:	Basalt Fiber Reinforced Polymer (BFRP)
Trade / Brand Name:	BasaFlex™
Material Name Identifier / Synonyms:	Basalt Continuous Fiber Roving; [BFRP] Composite Rebar
Product Use:	Non-Corrosive; Non-Metallic Basalt Fiber Reinforcement for Concrete and Asphalt
Manufacturer:	Basanite Industries, LLC (A wholly owned subsidiary of Basanite, Inc.) 2041 NW 15 th Avenue Pompano Beach, FL 33069 U.S.A. www.BasaniteIndustries.com / info@BasaniteIndustries.com 954.532.4653
24-hour emergency contact:	Poison control center
Emergency telephone number:	1-800-222-1222

Section II. Hazards Identification

Specific Risks:



This product in its Solid State and under normal conditions does not present an inhalation, ingestion or skin hazard. However, airborne particulate may be created with increased mechanical stress or cutting, and may be considered nuisance dust and therefore should be minimized through the use of good work practices and adequate ventilation.

Primary Routes of Entry:

Via respirable dust to the lungs and respiratory system and via coarse dust and particulate to the eyes.

Primary Target Organs:

Lungs, respiratory system and eyes.

Potential Inhalation:

Irritating to the mucous membranes and respiratory tract. Excessive exposures to dust may cause sore throat, coughing or upper respiratory irritation.

Potential Skin Contact:

Possible dryness or irritation resulting from long term exposures to product dust.

Potential Eye Contact:

A mechanical irritant which can cause moderate to severe eye irritation.

Potential Ingestion:

Non-hazardous when ingested. Prolonged or repeated exposure may be irritating to mouth, throat and esophagus (sore throat, nausea and retching). Potentially a mild irritant to the GI tract if excessive quantity is ingested.

Medical Conditions Aggravated by Exposure:

Pre-existing chronic upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma.

Carcinogenicity:

This product is not classified by NTP or OSHA.

Physical or Chemical hazards:

Fire or Explosion – None

Section III. Composition Information on Ingredients

This product is composed of continuous basalt fiber which is chemically bonded using an epoxy resin matrix. There are no anticipated hazards associated with the final resin system. The following is a breakdown of the basalt fiber matrix system:

75% - 80% of Chemical Matrix			
Chemical Name	CAS #	%	GHS-US Classification
Amorphous Silicon Dioxide (SiO ₂)	7631-86-9	51.5 - 60.0	Not Classified
Aluminum Oxide (Al ₂ O ₃)	1344-28-1	14.5 - 18.5	Not Classified
Iron Oxide (FeO & Fe ₂ O ₃)	1309-37-1	9.0 - 14.0	Not Classified
Calcium Oxide (CaO)	1305-78-8	5.5 - 9.5	H315 Skin Irritant 2 H318 Eye Irritant 1 H335 STOT Skin Exposure 3
Manganese Oxide (MgO)	1344-43-0	3.0 - 5.5	Not Classified
Titanium Oxide (TiO ₂)	13463-67-7	0.5 - 2.5	H351 Carcogenicity 2
Sodium Oxide (Na ₂ O)	1313-59-3	0.5 - 2.5	Not Classified
Potassium Oxide (K ₂ O)	12136-45-7	0.5 - 2.5	Not Classified
20% - 25% of Chemical Matrix			
Chemical Name	CAS #	%	GHS-US Classification
Diglycidyl Ether of Bisphenol A	25068-38-6	10 - 12.5	HS07
Methyltetrahydrophthalic Anhydride (MTHPA)	34090-76-1	10 - 12.5	HS07
*** If chemical name is "proprietary" and the volume % is listed as a range, the specific chemical composition has been withheld as a trade secret. ***			

Section IV. First Aid Measures

Inhalation:

Move person to fresh air. Suspend airborne particle activity. Drink water to clear throat and blow nose to evacuate dust. If coughing and irritation develop, call a physician.

Eye Contact:

Flush with large amounts of water until irritation subsides, at least 15 minutes. See a physician if irritation persists.

Skin Contact:

If skin is irritated, use a wash cloth to help remove fibers. Wash with mild soap and warm water, using normal good personal hygiene practices.

Ingestion:

Not a likely form of exposure, and emergency procedures not normally required. May be a temporary irritant to the GI system.

SECTION V - FIREFIGHTING MEASURES

NFPA Rating:	Health: 0 Flammability: 0 Instability: 0 Special Hazards: 0
Flashpoint and Method:	This is a non-flammable product. LEL: N/Ap UEL: N/Ap
Extinguishing Method:	Not applicable. Product will not burn.
Special Firefighting Procedures:	Not applicable
Fire or Explosion Hazards:	None

SECTION VI - ACCIDENTAL RELEASE MEASURES

Clean-up Procedures:	Avoid creating airborne dust. Dust suppressing cleaning methods such as wet sweeping or vacuuming should be used to clean the work area. If vacuuming, the vacuum should be equipped with an efficient secondary filter (such as a HEPA filter). Recommend avoiding the use of compressed air or dry sweeping for cleaning. Scoops or shovels may be used to minimize dust. Use respiratory protection in dusty conditions.
Personal Precautions:	If dusty conditions exist, wear a respirator face mask approved for use with dusts such as 3M 6000 or 8511 Series, N-95 or equivalent.
Environmental Precautions:	None required. Product is considered an inert solid.

SECTION VII - HANDLING AND STORAGE

Storage Requirements:	There are no special storage requirements.
Special Sensitivity or Incompatibility:	N/A
Handling Precautions:	When handling the product, wear gloves to avoid skin contact if possible.
Storage:	No restrictions. There are no incompatible materials, temperature concerns or UV restrictions.

SECTION VIII - EXPOSURE CONTROLS / PERSONAL PROTECTION

General Information:	Always use gloves and eye protection when cutting. As with most industrial materials, it is prudent to minimize unnecessary exposure to respirable dusts. Note that industrial hygiene standards and occupational exposure limits differ between countries and local jurisdictions. Check with your employer to identify any “respirable dust” exposure standards to follow in your area. If no regulatory dust control standard applies, a qualified industrial hygiene professional can assist with a specific evaluation of workplace conditions and the identification of appropriate respiratory protection practices.
Respiratory Protection:	For dust concentrations below the applicable exposure limit value, personal protection equipment is not required. If PEL/TLV is exceeded, wear an approved face mask such as 3M 6000 or 8511 Series, N-95 or equivalent, to protect against dust.

Eye Protection:	Wear safety glasses with side shields or goggles to protect eyes against dust and particulate matter when cutting.
Skin Protection:	Under normal conditions use of protective gloves and body-covering clothing are adequate.
Engineering Controls:	Maintain sufficient mechanical or natural ventilation to assure dust concentrations remain below PEL/TLV when cutting. Dust suppressing control technologies such as local exhaust ventilation, point of generation dust collection, down draft work stations, emission controlling tool designs, and materials handling equipment are effective means of minimizing airborne dust emissions. Ventilation systems should be designed by a professional engineer.

SECTION IX - PHYSICAL and CHEMICAL PROPERTIES

Physical Form:	Soli. Dark olive to black with no characteristic odor.
Density:	2.67 g/cm ³
Melting Point:	1500° C (Melt Point); 1050° C (Begins Softening)
Boiling Point:	N/A
Flash Pont:	N/A
Flammability:	Non-Combustible
Solubility:	Water: Nil Solvents: Very Slight

SECTION X - STABILITY and REACTIVITY

Stability:	Product is stable under normal conditions.
Hazardous Polymerization:	Cannot occur.
Incompatibilities:	None in designed use.
Conditions to Avoid:	None in designed use.
Decomposition Products:	No hazardous products of decomposition.

SECTION XI - TOXICOLOGICAL INFORMATION

Acute Toxicity:	Under normal use, no health effects are expected.
Skin Irritation:	Based on available data, the criteria for classification are not fulfilled.
Eye Damage or Irritation:	May cause mechanical irritation.
Respiratory or Skin Sensitization:	None of the substances listed in Section III are classified as allergenic.
Carcinogenicity:	None of the substances listed in Section III are classified as carcinogenic. Basalt fibers used in the reinforcement have a diameter of more than 3 micrometers and therefore cannot enter the lungs.
Reproductive Toxicity:	None of the substances listed in Section III are classified as reproductive toxic.
STOT Exposure:	Based on the available data, no classification criteria are met for single or repeated exposure.

SECTION XII - ECOLOGICAL INFORMATION

Toxicity:	No eco-toxicity effect known.
Persistence and degradability:	This product is not biologically degradable.
Bio accumulative potential:	No harmful long-term effects are expected on aquatic organisms.
Mobility in soil:	This product is not soluble in water.
Results of PBT and vPvB assessment:	This product does not contain a PBT or vPvB.
Other adverse effects:	No known significant effects or critical hazards.

SECTION XIII - DISPOSAL CONSIDERATIONS

Waste Disposal Method:	Disposal of waste material according to Local, State, Federal, and Provincial Environmental Regulations Hazardous waste: Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 91/689/EEC.
Packaging Methods of disposal:	The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill only be considered when recycling is not feasible.

SECTION XIV - TRANSPORTATION INFORMATION

US DOT Shipping Name:	Not regulated
DOT Label:	N/A
N/NA Number:	N/A
Canadian TGD Shipping Description:	Not regulated as dangerous goods according to Canadian TDGA.
IMO:	Not regulated as dangerous goods according to the IMDG Code.
ICAO:	Not regulated as dangerous goods according to the IACO Technical Instructions.

SECTION XV - REGULATORY INFORMATION

BasaFlex™ products do not contain SVHC's with a weight percentage of > 0.1%, and does not contain any substances subject to reporting requirements at or above de minimis quantities.

Federal TSCA:	All components are listed and comply with requirements.
Chemical safety assessment:	No Chemical Safety Assessment has been carried out.

Disclaimer: Data quoted in this Safety Data Sheet relate exclusively to the basalt product described and not to a combination of this product with any other kind of substance, a different preparation, or a different material resp. process. The data describes issues relevant to safety according to the best of our knowledge as it is to date and are intended to protect human beings and the environment. They do not represent quality characteristics, nor may they be construed as a release of responsibility when handling basalt products nor from compliance with existing legal regulations and obligations. The data address wholesalers and are not intended for private users.