

## MATERIAL SAFETY DATA SHEET

MSDS Basalt Fibers

Date of Issue: Feb. 8<sup>th</sup>, 2014

### SECTION 1: PRODUCT IDENTIFICATION

Identity of the Product: Basalt fiber products--Rovings, yarns, woven & nonwoven, fabrics, fiber mats, meshes

Supplier: Culimeta America, Inc.  
805 Essex Drive  
Summerville, SC 29485

Emergency Phone: (843) 708-8444

Date of last revision: Feb. 8<sup>th</sup>, 2014

### SECTION 2: INGREDIENTS AND HAZARD CLASSIFICATION

Risks: N/A

Identification of the hazard: No likely hazard. Continuous exposure can be a mechanical irritant to the skin, eyes and respiratory tract.

Health hazards:

Short term hazard: There is no known long term effect from contact with this product.

Environmental hazards: N/A

### SECTION 3: PHYSICAL DATA

Composition/ Chemical Description: Continuous Basalt Mineral Fibers with diameters larger than 5.5 microns. Made from molten Basalt Rock. No more than 5% chemical sizing agents added to facilitate handling.

Appearance	solid		
Color	bronze-brown		
Odor	very limited		
Safety Related Data	value	unit	method
Boiling point	N/A	degr. C	N/A
Melting point	1450+-150	degr. C	-
Vitrification point	1050+-100	degr. C	-
Decomposition point	N/A	degr. C	N/A
Inflammation point	non-combustible		
Self inflammation	not self-inflaming		
Explosion limits	N/A		
Specific gravity	2.7	g/mc(3)	20 degr. C
Solubility in water	insoluble		20 degr. C
pH	6		20 degr. C, 100g/l
Vapor pressure	N/A	mm Hg	(air =1)
Evaporation rate	N/A		(n-butyl acetate =1)

## SECTION 4: FIRE AND EXPLOSION HAZARDS

### Fire Fighting Procedure

Suitable extinguishing media: N/A. Product will not support combustion  
 Hazardous decomposition: None Known

## SECTION 5: REACTIVITY

### Accidental Material Release or Spillage

Personal protective equipment: See section 8  
 Environmental protection: Do not allow Basalt fiber dust to spread, avoid conditions that allow generation of dust.  
 Cleaning: Vacuum clean dust with unit with suitable filtration such that it does not vent dust. Use dust suppressant when sweeping is required.

Stability and Reactivity: Stable  
 Materials to avoid: None known  
 Hazardous decomposition or by-products: None known  
 Hazardous polymerization Products: Will not occur

## SECTION 6: HEALTH HAZARD DATA

Routs of Entry: Inhalation of dust  
 Health Hazards (Acute) dust may irritate eyes or skin  
 Carcigonecity: Is not known to be carcinogenic  
 Toxicology: Basalt mineral fibers produced with bushing technology have controlled diameters exceeding 5 mcm. The fibers do not split longitudinally. If machining or other mechanical processes produce a respirable fraction of 5 mg/m(3), then the OSHA standard for nuisance dust is triggered.

## SECTION 7: EMERGENCY FIRST AID

### Emergency & First Aid Procedures

Inhalation: Not likely to be inhaled, unless the material is in dust form. No specific treatment is necessary. For dust inhalation.  
 Skin contact: Wash well with soap and running, warm water.  
 Eye contact: Flush immediately with soap and large volumes of warm water. If problems develop, seek medical attention.  
 Ingestion: ingestion is extremely unlikely. If ingested, seek medical attention.

## SECTION 8: EMPLOYEE PROTECTION

### Exposure, limits & Personal Protective Equipment

Fibrous Basalt (Fibrous Basalt dust), CAS No. 65997-17-3 Basalt fiber continuous filament	OSHA PEL (8 h TWA) 5 mg/m(3) (respirable dust) 1 fiber/ cm(3) 15 mg/m(3) (total dust) 1 fiber/ cm(3) (proposed)	ACGIV TLV (8h TWA) 5 mg/m(3)      approved respirator and local exhaust for the processing machines
Size (mcm)	N/A	N/A

Personal protective clothing & equipment  
Respiratory protection:

When mechanical processing produces dust levels exceeding recommended levels, use an approved d regulator and use suitable local exhaust devices.

Protective gloves:

Fiber-proof gloves are recommended

Eye protection:

Use suitable safety glasses.

Body protection:

Use clothing that suitably covers body.

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## SECTION 11: PRECAUTIONS: HANDLING, STORAGE AND DISPOSAL

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Wast Disposal:	Dispose in accordance with local, state and federal regulations.
Handling:	Material is non-hazardous, use proper material handling equipment
Storage:	Store in dry environment
Ecology:	Only natural Basalt rock with no additives is used in producing Basalt continuous filaments.
Transportation:	ADR/ VLG: N/A IMCO: N/A IATA: N/A Transportation of goods is non-hazardous, and should be done in accordance with above regulations. Weather protection of packaged goods is recommended.
Regulatory Information:	EC regulations require: Adherence to common precautions and local regulations for handling of chemicals. There are no current requirements for labelling under the method of the "General Classification Guidelines for Compositions in the EC", current editions at time of production.

The information presented herein is believed to be factual as it has been derived from the works and opinions of persons believed to be qualified experts; however, nothing contained in this information is to be taken as a warranty of representation for which Culimeta America, Inc. bear legal responsibility. The user should review recommendations in the specific context of the intended use to determine whether they are appropriate.