

# Safety Data Sheet

Titanium Brand Textiles - Cloth, Tape, Rope, Tubing, Fibers



Revised: May 1, 2015

## Section 1 – Chemical Product and Company Identification

**Product Name:** Basalt Textiles

**Product Use:** Thermal Insulation

**Manufacturer Information:** Design Engineering, Inc.

Design Engineering, Inc.

604 Moore Road

Avon Lake, OH 44012

(440) 930-7940

Emergency Contacts:

**Prepared By**

**Preparation Date:** April 26, 2014

**Supersedes:** July 26, 2013

## Section 2 – Composition/Ingredient Information

### 2. Data on composition/ingredients

#### 2.1 Description:

Roving of continuous basalt filaments with nominal diameter of filaments 10-17 micron and moisture content below 0,5%.

2.2	Hazardous ingredients:	EINECS – No.:	Content %:	Hazard symbol:	R-settings:	Limit values, type:
	N/A	---	---	---	---	---

#### 2.3 Additional remarks:



HEALTH	FLAMMABILITY	PHYSICAL HAZARD
X	0	0
PERSONAL PROTECTION		

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM	
HAZARD INDEX	PERSONAL PROTECTION INDEX
4 = SEVERE HAZARD	As indicated by other designation appropriate to individual circumstances
3 = SERIOUS HAZARD	As indicated by other designation appropriate to individual circumstances
2 = MODERATE HAZARD	As indicated by other designation appropriate to individual circumstances
1 = SLIGHT HAZARD	As indicated by other designation appropriate to individual circumstances
0 = MINIMAL HAZARD	As indicated by other designation appropriate to individual circumstances
<b>PERSONAL PROTECTION EQUIPMENT</b>	
P1: Prevent release to the environment	P2: Avoid contact with skin
P3: Wear suitable protective clothing	P4: Do not breathe dust/fume/gas/mist/vapors/spray
P5: Use personal protective equipment (PPE)	P6: Wash face before eating, drinking or smoking
P7: Cleanly separate and store	P8: Wear eye protection
P9: Use appropriate container for waste	P10: Use full protective suit
P11: Store in a cool, dry place	P12: Use only the recommended extinguishing media
P13: Store in a well-ventilated place	P14: Use explosion-proof electrical/ventilating/lighting equipment
P15: Store in a shaded area	P16: Use non-flammable extinguishing media
P16: Use non-flammable extinguishing media	P17: Use non-flammable extinguishing media
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## Section 3 – Hazards Identification

### 3. Potential risks

3.1 Type of Risk:	N/A
R-settings	N/A
3.2 Special risks to individuals and environment:	N/A

## Section 4 – First Aid Measures

### 4. First-Aid

- 4.1 General: Providing instructions for use are complied with, there is no need for First-Aid. Please note the information disclosed in points 7 and 8.
- 4.2 After inhalation: Normally not applicable.  
If necessary, take persons out in the open that they get some fresh air.
- 4.3 After skin contact: Normally not applicable.  
If necessary, remove mechanically.
- 4.4 After eye contact: Normally not applicable.  
If necessary, rinse with water for several minutes.
- 4.5 After swallowing: Normally not applicable.  
If necessary, wash mouth with water.
- 4.6 Information for physician: Normally not applicable.

## Section 5 – Fire Fighting Measures

### 5. Fire fighting

- 5.1 Appropriate fire fighting media:  
Adjust fire in the surroundings. The products are non-combustible.
- 5.2 Inappropriate fire fighting media (safety reasons): N/A
- 5.3 Particular risks specific to the product, its combustion products or developing gasses: N/A
- 5.4 Required fire fighting PPE: N/A

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## Section 6 – Actions on inadvertent release

### 6. Actions on inadvertent release

Absorb by mechanical means and dispose of according to item 13. Avoid development of dust. See also item 8.

## Section 7 – Handling and Storage

### 7. Handling and storage

#### **7.1 Safe handling information including technical safe guarding:**

Increased mechanical stress of the basalt roving may generate dust and airborne fibers, which may cause discomfort. At skin contact, skin irritations are possible. Availability of a local suction is advised. The general hygiene rules and measures applying for the handling of chemicals must be employed.

#### **Fire and explosion related information:**

The products are non-combustible.

#### **7.2 Safe storage conditions:**

##### **Storage room/warehouse requirements:**

Storage rooms must be well ventilated. Do not store product in passage ways and staircases; also do always store it in original packing which should be intact.

**Incompatible materials/restrictions on combined storage:** N/A

#### **Storage conditions:**

Storage at room temperature and dryly. Protect against humidity.

**Special requirements on electric systems and equipment:** N/A

**Static charge prevention:** N/A

**Storage class:** 13

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## Section 8 – Exposure Controls / Personal Protection

### 8. Exposure control and Personal Protective Equipment (PPE)

8.1 Additional information for the design of technical equipment: See item 7.1

8.2 Substances with work-place related limit values/classification subject to control:

CAS-No., EINECS-No.:	Substance:	Max. worksite concentration (MAK):	Peak value:
---	General dust limit value: Respirable content (E): Alveola related content (A):		

#### Additional remarks:

The fibers processed in our products are uniform and are not subject to EC Guideline 97/69/EC. Furthermore, our products are not considered carcinogenic according to EC Guideline 1999/45/EC and TRGS 220 (Germany). The basalt fibers processed in our products are produced according to a defined process and have a nominal diameter of 10 - 19 micron.

Manmade mineral fibers categorized in appendix 7 HazMat Ordinance or TRGS 521 are subject to a TRK value of 250,000 fibers/m<sup>3</sup> according to TRGS 900.

### 8.3 Personal Protective Equipment (PPE)

If the instructions of item 7.1 is complied with, PPE is not required.

**Respiratory protection:** At elevated airborne fiber and dust levels, we recommend to use a respiratory equipment (dust mask with fine filter according to EN 143), Filter P1 (EN 141).

**Eye protection:** In case of airborne fibers and dust, we recommend to wear safety glasses (EN 166).

**Hand protection:** We recommend safety gloves to avoid possible skin irritation (leather or cotton gloves).

**Body protection:** Long-sleeved safety clothing as well as normal personnel protective equipment (e.g. safety boots EN 344).

#### General protection and hygiene:

Before breaks and after the end of the work day, wash hands thoroughly. In case of sensitive skin, apply a rich, protective hand lotion/cream. To protect against skin irritation, avoid wearing tight-fitting garments.

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## Section 9 – Physical and Chemical Properties

### 9. Physical and chemical properties

#### 9.1 Appearance

Shape/State of aggregation: solid      Color: dark-olive      Odor: inodorous

9.2 pH-Value (2g in 100 ml of water, 20 °C): N/A(DIN 54276)

9.3 Boiling point/boiling range: N/A

9.4 Melting point/melting range: approx. 1050 °C (softening point of basalt)

9.5 Flash point: N/A

9.6 Flammability: The products are non-combustible.

9.7 Ignition temperature: N/A

9.8 Self-ignition: N/A

9.9 Danger of explosion: N/A

9.10 Explosion limits lower: N/A      upper: N/A

9.11 Fire promoting properties: Cannot be applied according to the laws of the European Community.

9.12 Vapor pressure: N/A

9.13 Density, expressed as bulk density ( 20 °C): 2.67 g/cm<sup>3</sup> (raw basalt)

9.14 Solubility in water: insoluble

9.15 Solubility in fat: insoluble

9.16 Distribution coefficient n-Octanol/water: N/A

9.17 Other:

## Section 10 – Chemical Stability & Reactivity Information

### 10. Stability and reactivity

10.1 Conditions to be avoided: humidity

10.2 Substances to be avoided: When handled as instructed, none known.

10.3 Hazardous decomposition products: N/A

10.4 Other: These products are not reactive.

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## Section 11 – Toxicological Information

### 11. Toxicology data

#### 11.1 Toxicological tests

Acute toxicity, e.g. LD50:	no data available
Specific symptoms of animal tests:	no data available
Primary irritant/caustic action:	no data available
Sensitization:	no data available
Effects after repeated or prolonged exposure: (sub-acute to chronic toxicity)	no data available
Carcinogenic risks:	no, 97/69/EC
Genotype and reproduction risks:	no data available
Other:	See item 8.2

#### 11.2 Practical experience

Classification specific information:	no data available
Other:	

#### 11.3 General remarks:

## Section 12 – Ecological Information

### 12. Ecology data

12.1 Elimination data (Persistence and degradability): no data available

#### 12.2 Environmental behavior

Mobility:	no data available
Bio-accumulation potential:	no data available

#### 12.3 Eco-toxicological effects

Aqueous toxicity:	no data available
Behavior in sewage plants:	N/A

#### 12.4 Other ecological data:

CSB-Value: - mg/g	BSB5-Value: - mg/g
AOX-note: N/A	
General remarks:	

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## Section 13 – Disposal Considerations

### 13. Disposal

#### 13.1 Product:

Waste Code No.: EWC-Code 101103

Appropriate (waste) dump or garbage incinerating plant.

#### 13.2 Impure packing/wrapping material:

Remove basalt fiber remains from packing/wrapping material. Disposal/recycling according to Packing Material Ordinance.

Waste code No.:

Waste type:

Accountability:

## Section 14 – Transportation Information

### 14. Transport (national/international)

14.1 Overland: ADR/RID-, GGVS/GGVE-Class

14.2 Inland waterways: ADN/ADNR-Class

14.3 Overseas: IMDG/GGVSee-Class

14.4 Air: ICAO/IATA-Class

14.5 Transport/other info: Non-hazardous goods according to items 14.1 – 14.4.

## Section 15 – Regulatory Information

### 15. Regulations

#### 15.1 Identification according to EC Guidelines

Risk designation and alphabetical code: N/A

contains: N/A

R-settings: N/A

S-settings: N/A

Specific identification of certain preparations: N/A

#### 15.2 National regulations:

Indications for employment limit: N/A

Ordinance conc. disruptive events: N/A

Operating safety ordinance: N/A



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Technical instructions  
on maintaining air purity: N/A

Water hazard class: non-hazardous according  
to VwVwS dd. 17.05.1999  
ID-No. according to  
catalogue of substances  
hazardous to water 765  
(glass)

## Section 16 – Other Information

### 16. Other

Further information:

N/A = not applicable

***Please note:***

*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 roving nor from compliance with existing legal regulations and obligations. The data address wholesalers and are not intended for private users.*

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