



HEATSHIELD PRODUCTS, INC.

HEAT PROTECTION YOU CAN COUNT ON

MSDS SHEET

PRODUCT NAME: LAVA WRAP

SECTION 1: CHEMICAL PRODUCT

Chemical Name: *Basalt (Lava) Insulation*

Product Use: *Thermal Insulation*

SECTION 2: COMPOSITION/INGREDIENT INFORMATION

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-setting:	Limit values Type:
N/A	---	---	---	---	---

2.3 Additional remarks:

SECTION 3: HAZARDS IDENTIFICATION

- 3.1 Type of risk:** N/A
- R-setting:** N/A
- 3.2 Special risks to individuals and environment:** N/A

SECTION 4: FIRST AID MEASURES

- 4.1 General:** Providing instructions for use of these products 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 person(s) 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 out with water.
- 4.6 Information for physician:** Normally not applicable.

SECTION 5: FIRE FIGHTING MEASURES

- 5.1 **Appropriate fire fighting media:** Adjust fire in the surroundings. These 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
- 5.5 **Additional Information:**

SECTION 6: ACTIONS ON INADVERTENT RELEASE

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

SECTION 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 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

SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION

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., EINCS-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 & HazMat Ordinance or TRGS 521 are subject to a TRK value of 250,000 fibers/m³ according to TRGS 900.

8.3 Personal Protective Equipment (PPE)

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

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

Eye Protection: In case of airborne fibers and dust we recommend wearing 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 tight fitting garments.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Dark-olive	Odor	Odorless
Physical State	Solid/Fibrous	Melting Point	Approx 1050°C
Density (expressed as bulk density (20°C))	2.67 g/cm ³ (raw basalt)	pH-Value (2g in 100 ml of water, 20°C)	N/A (DIN 54276)
Vapor Pressure	N/A	Freezing Point	Not Applicable
Self ignition	N/A	Soluble in water	Insoluble
Flash Point	N/A	Soluble in water	Insoluble
Flammability	Non-combustible	Ignition temperature	N/A
Fire promoting properties	N/A	Coefficient of n-Octanol/water	N/A
Explosion limits power	N/A	Danger of explosion	N/A

SECTION 10: CHEMICAL STABILITY & REACTIVITY INFORMATION

- 10.1 **Conditions to be avoided:** Humidity
- 10.2 **substance to be avoided:** When handled as instructed, none known.
- 10.3 **Hazardous decomposition products:** N/A
- 10.4 **Other:** These products are not reactive

SECTION 11: TOXICOLOGICAL INFORMATION

- 11.1 **Toxicology test**
- Acute toxicology, 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:** No data available
(sub-acute to chronic toxicity)
- 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

- 12.1 **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:**

SECTION 13: DISPOSAL CONSIDERATIONS

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

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|------|------------------------------|--|
| 14.1 | Overland: | ADR/RID, GGVS/GGVE-Class |
| 14.2 | Inland waterways: | AND/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

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|------|--|---|
| 15.1 | Identification according to EC Guidelines | N/A |
| | 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 |
| | Technical instructions on maintaining air purity: | N/A |
| | Water hazard class: | Non-hazardous according to VwVwS dd. 17.05.199 ID-no. according to catalogue of substances hazardous to water 765 (glass) |