

1. Name of material, preparation method and manufacturer

1.1 Product data:

Trade name: KV12 Basalt roving

1.2 Application: Pultrusion, filament winding, multi-axial fabrics production

1.3 Manufacturer:

Kamenny Vek LLC, P.O. Box 180, 141980 Dubna,
Moscow region, Russia

Phone: +7-49621-23370 (Operator)

Facsimile: +7-49621-25051

Supplier:

Mineralnoe Volokno LLC, Tverskaya ul. 28, bld.B, 141980 Dubna,
Moscow region, Russia

Phone: +7-49621-23370 (Operator)

Facsimile: +7-49621-25051

1.4 Department to contact:

Marketing and Strategic Development:

Phone: +7-49621-23370 (Operator)

Facsimile: +7-49621-25051

Emergency contact:

After 18 o'clock week-days and 24h week-end:

Phone: +7-49621-23370 (On-duty gate guard)

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:

3. Potential risks

3.1 Type of Risk:

N/A

R-settings

N/A

3.2 Special risks to individuals and environment:

N/A

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.

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
- 5.5 Additional information:**

6. Actions on inadvertent release

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

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.

See also item 8.

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

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/m³ 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).

KV12 Basalt roving

- 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.

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/cm³ (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:

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.

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:** 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:

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:

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:

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.

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

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)

Other regulations, restrictions and prohibitions:

N/A

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.