



CBF Roving

Safety Data Sheet

1. Identification

Product description:	CBF Roving is a complex thread of straight-directed CBF with 5-7/7-9 μm diameter of monofilament, wound on a special spool for external unwinding.
Sizing:	Sized CBF has a silane-based coating for lubrication and protection of CBF monofilaments. Sized CBF has moisture content below 0.4 %.
Trade Name:	UBT Continuous Basalt Fiber/UBT CBF
Product code:	Direct roving: UBT/CBF/DR Assembled roving: UBT/CBF/AR
Application:	Pultrusion, filament winding, production of prepregs, woven fabrics/tapes, UD and multi-axial fabrics.
Manufacturer:	"UBT" LLC 20, Pushkinska Str., office 39, 01024, Kyiv
Supplier:	"UBT" LLC
Contact:	info@ukrbastech.com

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2. Hazardous ingredients

Basalt is a naturally occurring inert rock; it is non-toxic and does not contain any toxic impurities.

The surface coating is considered as non-hazardous.

CAS number: 65997-17-3 (Glass, oxide, chemicals)

EC number: 266-046-0 (Glass, oxide, chemicals)

REACH regulation:

Basalt fiber is exempt from REACH registration according to Annex V (Entry 11) of REACH regulation, since basalt fiber is not listed in Regulation No 1272/2008 (formerly in Directive 67/548/EEC), considering that basalt fiber is continuous filament fiber and cannot be included in groups No 650-016-00-2 Mineral wool and No 650-017-00-8 Refractory Ceramic Fibers, Special Purpose Fibers. The chemicals of the silane-based coating whether not listed in Regulation No 1272/2008 or present in concentrations below their

3. Potential Risks

Type of Risk:	<p>Basalt fibers are not normally respirable as they have an average 5-7/7-9 μm diameter of monofilament in CBF Roving.</p> <p>The World Health Organization classifies fibers with a diameter of $> 3\mu\text{m}$ are considered non-respirable.</p> <p>Potential irritant causing irritation to skin, eyes and respiratory tract during mechanical handling.</p> <p>High concentrations of airborne dust may cause a build up of dust in the ears, eyes and upper respiratory tract.</p> <p>High volumes of airborne basalt fiber may also reduce visibility in the workplace.</p> <p>CBF from UBT has monofilament diameter $> 5\mu\text{m}$, and only splits longitudinally when processed mechanically through grinding or sanding etc.</p>
Long Term Risks:	<p>There are no known long term health effects connected to the long term use of CBF.</p>
Special risks to individuals and environment:	<p>Inhalation risk if mechanical grinding or sanding is performed on the product: To UK HSE EH40/2005 Workplace Exposure Limit (8 h TWA) Long Term Exposure Limit of MMMF 5 mg/m^3 (respirable dust) 2 fiber/cm^3</p>

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4. First Aid

General:	<p>It is very unlikely that CBF will cause harm. However, CBF can cause irritation through splinters of filament entering the skin or other body areas. Any fiber fragments should be removed from the person by gentle washing.</p>
After inhalation:	<p>Inhalation is unlikely to occur unless the basalt is being mechanically ground or sanded from continuous fibers in to dust. If irritation to the respiratory tract occurs and persists seek medical attention. See also sections 3.2 above for exposure limits and 8.3 for correct handling.</p>
After skin contact:	<p>Remove from skin and with gentle washing of affected site with soap and cool clean water. Seek medical attention if symptoms persist or if the fibers become embedded in the skin.</p>
After eye contact:	<p>Rinse with clean water for several minutes and seek medical attention if symptoms of irritation persist.</p>
After swallowing:	<p>Seek medical attention immediately.</p>

5. Fire fighting

Appropriate firefighting media:	<p>Basalt fiber is non-flammable and non-explosive. Use normal firefighting measures in the event of a fire.</p>
Inappropriate firefighting media (safety reasons):	<p>None</p>
Particular risks specific to the product, its combustion products or developing gasses:	<p>None</p>
Required firefighting PPE:	<p>None</p>
Additional information:	<p>None</p>

6. Actions on inadvertent release

Recover using vacuum or brushing means and dispose of according to item 13. Avoid creating airborne dust during recovery by means of wetting with water. See also item 8 for safe airborne particulate limits.

7. Handling and storage

Safe handling information including technical safe guarding:

Processing CBF roving may generate dust and airborne fibers. This may cause discomfort on skin contact. Skin irritations and splinters are possible. Availability of local exhaust ventilation with vacuum system is advised to remove any dust and loose fiber. The general hygiene rules and measures applying for the handling of chemicals must be employed. Use of gloves and masks is recommended. Fire and explosion related information: The products are non-combustible.

Safe storage conditions

Storage room/warehouse requirements:

Storage rooms should be dry with low humidity. Storage at room temperature (20-23 °C) in dry, low humidity (55-65%) atmosphere. Always store it in original packing, which should be intact. Basalt fiber is relatively heavy; ensure that all storage is suitable for the weight that is being stored.

Incompatible materials/restrictions on combined storage: None

Storage conditions:

Storage at room temperature in dry, low humidity atmosphere.

Special requirements on electric systems and equipment: None

Static charge prevention: None

Storage class: 13

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

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

Fire and explosion related information: The products are non-combustible.

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

CBF is uniform in diameter and is not subject to EC Guideline 97/69/EC. CBF is not considered carcinogenic according to EC Guideline 1999/45/EC and TRGS 220 (Germany). The CBF produced have a 5-9 µm diameter of monofilament. 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. Consult with local authorities for acceptable exposure limits.

Personal Protective Equipment (PPE)

Respiratory protection:

At elevated airborne fiber and dust levels, use of respiratory equipment is recommended (dust mask with fine filter according to EN 143), Filter P1 (EN 141).

Eye protection:

In case of airborne fibers and dust, safety glasses with side shields are recommended; EN 166.

Hand protection:	Safety gloves should be worn to avoid possible skin irritation and the application of a suitable work hand cream for additional protection.
Body protection:	Long-sleeved safety clothing should be worn as well as normal personnel protective equipment such as safety boots to EN 344.
General protection and hygiene:	Wash hands thoroughly before eating, visiting the toilet and at the end of the working day. In case of sensitive skin, apply a protective moisturizing barrier cream after washing hands and before handling fibers. Use of caps, protective gloves, cotton coveralls or long-sleeved, loose-fitting clothing is recommended. Appropriate techniques should be used to remove contaminated clothing. Work clothing should be laundered separately from other clothing before reuse.

9. Physical and chemical properties

Appearance	Shape/State of aggregation: Single length of CBF wrapped as a cylindrical bobbin.
Color	Golden-brown
Odor	None
pH-Value (2g in 100 ml of water, 20 °C):	Not Applicable (DIN 54276)
Boiling point/boiling range:	Not Applicable
Melting point:	~1550 °C
Flash point:	Not Applicable
Flammability:	The product is non-combustible.
Ignition temperature:	Not Applicable
Self-ignition temperature:	Not Applicable
Danger of explosion:	Not Applicable
Explosion limits	
Lower:	Not Applicable
Upper:	Not Applicable
Fire promoting properties:	Not Applicable
Vapor pressure:	Not Applicable
Density, expressed as bulk density (20 °C):	2.64 g/cm ³ (raw basalt)
Solubility in water:	Insoluble
Solubility in fat:	Insoluble
Distribution coefficient n-Octanol/water:	No Data Available
Other:	None

10. Stability and reactivity

Conditions to be avoided:	Humidity > 65%. Exposure to high temperatures (above +200 °C).
Substances to be avoided:	None
Hazardous decomposition products:	None
Other:	This product is inert.

11. Toxicology data

General remarks:	CBF is non-toxic.
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 Data Available
Genotype and reproduction risks:	No Data Available
Other:	None
Practical experience	
Classification specific information:	No Data Available

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12. Ecology data

Toxicity:	This product is non-toxic
Persistence and degradability:	Not applicable
Bio accumulative potential:	Not applicable
Mobility in soil:	Not applicable
Results of PBT and vPvB assessment:	Not applicable
Other adverse effects:	Not applicable
Additional information:	None

13. Disposal

Disposal of Product:	CBF is non-hazardous, inert solid waste and should be disposed of according to local laws and guidelines.
Waste Code No:	EWC-Code 101103 Appropriate landfill.
Disposal of Used Packing/ Wrapping material:	Remove waste CBF from cardboard spool and recycle according to local disposal/recycling rules.
Waste Code No:	EWC Code 03038
Waste type:	Cardboard
Waste Code No:	EWC Code 150102
Waste type:	Plastic Heat Shrink Wrap

14. Transport information

UN number:	Not Applicable - Product is Non-hazardous
UN proper shipping name:	Not Applicable
Transport hazard class(es):	Not Applicable
Packing group	Not Applicable

Environmental hazards:	Not Applicable
Special precautions for user:	Not Applicable
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:	Not Applicable

15. Regulations

Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations:

REACH regulation:	Exempt from registration
Authorizations and/or restrictions on use:	Not Applicable
Water hazard class:	Substances non-hazardous to waters Number 1.2a Class 765
Other regulations, restrictions and prohibition regulations:	If mechanically ground or sanded air exposure guidelines to UK HSE EH40/2005 Workplace Exposure Limit (8 h TWA) Long Term Exposure Limit of MMMF 5 mg/m ³ (respirable dust) 2 fiber/cm ³

Chemical Safety Assessment:	CBF is an inert product made purely of molten basalt stone. No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.
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16. Other

European Chemical Hazard and Precautionary Statements:	CBF is an inert product made purely of molten basalt stone. No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.
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P301 + P330 + P331	IF SWALLOWED: rinse mouth with fresh water. Do NOT induce vomiting.
P302 + P350	IF ON SKIN: Gently wash with plenty of soap and water.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P335	Brush off loose particles from skin.
P402	Store in a dry place.
P501	Dispose of contents/container to local refuse facility.
H316	Causes mild skin irritation.
H335	May cause respiratory irritation.

R-phrases
Code
R36/37/38

Phrase
Irritating to eyes, respiratory system and skin.

S-phrases
Code

S22	Do not breathe dust.
S25	Avoid contact with eyes.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S37/39	Wear suitable gloves and eye/face protection.
S63	In case of accident by inhalation: remove casualty to fresh air and keep at rest.
S64	If swallowed, rinse mouth with water (only if the person is conscious).

17. Further Regulatory information

OSHA/HCS status:	CBF is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
United States inventory (TSCA 8b):	Not Applicable
Australia inventory (AICS):	All components are listed or exempted
Canada inventory (DSL):	All components are listed or exempted
China inventory (IECSC):	All components are listed or exempted
Japan inventory (ENCS):	All components are listed or exempted
Korea inventory (KECI):	All components are listed or exempted
New Zealand (NZIoC):	All components are listed or exempted
Philippines inventory (PICCS):	All components are listed or exempted
Europe inventory (REACH):	All components are listed or exempted
United States SARA 302/304	
SARA 304 RQ:	Not applicable
SARA 311/312:	
Classification:	Not applicable
Composition/information on ingredients:	No products were found

Hazardous Material Information System (U.S.A.)

Health:	1
Flammability:	0
Physical hazards:	0

The customer is responsible for determining the PPE code for this material. National Fire Protection Association (U.S.A.)

Health:	1
Flammability:	0
Instability:	0
Data of previous issue:	No previous validation

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. (*) Chronic effects

DISCLAIMER OF LIABILITY

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