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Safety data sheet

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.
Date / Revised: 07.06.2019 Version: 1.0
Product: **Ultrafuse BVOH**

(ID no. 959791/SDS_GEN_EU/EN)
Date of print 07.06.2019

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Ultrafuse BVOH

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use: 3D Printing

1.3. Details of the supplier of the safety data sheet

Company:
BASF SE
67056 Ludwigshafen
GERMANY

Telephone: +49 621 60-0
E-mail address: global.info@basf.com

1.4. Emergency telephone number

International emergency number:
Telephone: +49 180 2273-112

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

According to Regulation (EC) No 1272/2008 [CLP]

No need for classification according to GHS criteria for this product.

2.2. Label elements

Globally Harmonized System, EU (GHS)

The product does not require a hazard warning label in accordance with GHS criteria.

2.3. Other hazards

According to Regulation (EC) No 1272/2008 [CLP]

The product may cause burns, if handled in the melted state.

SECTION 3: Composition/Information on Ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Chemical nature

polymer blend based on: alcohols

Hazardous ingredients (GHS)
according to Regulation (EC) No. 1272/2008

methanol

Content (W/W): >= 1 % - < 3 %	Flam. Liq. 2
CAS Number: 67-56-1	Acute Tox. 3 (Inhalation - vapour)
EC-Number: 200-659-6	Acute Tox. 3 (oral)
REACH registration number: 01-2119433307-44	Acute Tox. 3 (dermal)
INDEX-Number: 603-001-00-X	STOT SE (Central nervous system, Optic nerve) 1
	H225, H370, H301 + H311 + H331
	Specific concentration limit:
	STOT SE 2: 3 - < 10 %
	STOT SE 1: >= 10 %

For the classifications not written out in full in this section, including the hazard classes and the hazard statements, the full text is listed in section 16.

SECTION 4: First-Aid Measures

4.1. Description of first aid measures

Remove contaminated clothing.

If inhaled:
Keep patient calm, remove to fresh air.

On skin contact:
Wash thoroughly with soap and water.

On contact with eyes:
Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:
Rinse mouth and then drink 200-300 ml of water.

4.2. Most important symptoms and effects, both acute and delayed
Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Hazards: No hazards anticipated.

4.3. Indication of any immediate medical attention and special treatment needed
Treatment: Symptomatic treatment (decontamination, vital functions).

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing media
Suitable extinguishing media:
dry powder, foam, carbon dioxide

Unsuitable extinguishing media for safety reasons:
water jet

Additional information:
Water jet can rapidly spread fire.

5.2. Special hazards arising from the substance or mixture
harmful vapours, carbon oxides
Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire. Under certain conditions in case of fire other hazardous combustion products may be generated.

5.3. Advice for fire-fighters
Special protective equipment:
Wear a self-contained breathing apparatus.

Further information:
Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

SECTION 6: Accidental Release Measures

High risk of slipping due to leakage/spillage of product.

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes. Avoid dust formation. Avoid all sources of ignition: heat, sparks, open flame. Spilled material may cause slippery floors. Use personal protective clothing.

6.2. Environmental precautions

Do not discharge into drains/surface waters/groundwater.

6.3. Methods and material for containment and cleaning up

For small amounts: Sweep/shovel up.
For large amounts: Sweep/shovel up. Pack in tightly closed containers for disposal.
Dispose of contaminated material as waste according to item 13.

6.4. Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

SECTION 7: Handling and Storage

7.1. Precautions for safe handling

Provide suitable exhaust ventilation at the drying process and in the area surrounding the melt outlet of processing machines. Personal protective equipment should be worn during open handling. Avoid contact with skin and eyes. Provide exhaust ventilation if dust is formed. Keep safety distance from accumulated hot melt. Caution in the area of the melt-outlet during process start-up and during process interruptions, as well as at excessive processing. Protect against moisture.

7.2. Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Containers should be stored tightly sealed in a dry place. Do not store in steel or stainless steel containers; polyethylene is the preferred material.

Storage stability:
Avoid extreme heat.
Avoid freezing.

Frost sensitive
The packed product will be damaged by high temperatures.

SECTION 8: Exposure Controls/Personal Protection

8.1. Control parameters

Components with occupational exposure limits

67-56-1: methanol

Skin Designation (OEL (EU))
The substance can be absorbed through the skin.
TWA value 260 mg/m3 ; 200 ppm (OEL (EU))
indicative

8.2. Exposure controls

Personal protective equipment

Respiratory protection:
Wear respiratory protection if ventilation is inadequate. Suitable respiratory protection for higher concentrations or long-term effect: (Particle filter EN 143 P1)

Hand protection:
Chemical resistant protective gloves (EN 374)

Eye protection:
Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:
No body protection required if used for intended purpose and satisfying generally accepted industrial hygiene rules.

General safety and hygiene measures
Wearing of closed work clothing is recommended. When using, do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. At the end of the shift the skin should be cleaned and skin-care agents applied.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Form:	filament	
Colour:	white to light yellow	
Odour:	vinegar-like	
Odour threshold:	not determined	
pH value:	5 - 7	
melting range:	150 - 300 °C	
Boiling point:	The product is a non-volatile solid.	
Flash point:	> 200 °C	(closed cup)
Evaporation rate:	The product is a non-volatile solid.	
Flammability:	not highly flammable	
Lower explosion limit:	For solids not relevant for classification and labelling.	

Upper explosion limit:
For solids not relevant for classification and labelling.
Ignition temperature: 440 °C
Vapour pressure:
No data available.
Relative density:
Study does not need to be conducted.
Relative vapour density (air):
The product is a non-volatile solid.
Solubility in water: completely soluble
Solubility (qualitative) solvent(s): N, N-dimethylformamide, Methane, sulfinylbis-
soluble
Partitioning coefficient n-octanol/water (log Kow):
not applicable for mixtures
Self ignition: not self-igniting

Thermal decomposition: > 200 °C
Decomposes on heating.
Viscosity, dynamic:
not applicable, the product is a solid
Explosion hazard: not explosive
Fire promoting properties: not fire-propagating

9.2. Other information

SADT: Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.
Bulk density: approx. 1,140 kg/m3

SECTION 10: Stability and Reactivity

10.1. Reactivity
No hazardous reactions if stored and handled as prescribed/indicated.

10.2. Chemical stability
The product is stable if stored and handled as prescribed/indicated.

10.3. Possibility of hazardous reactions
The product is stable if stored and handled as prescribed/indicated.

10.4. Conditions to avoid
Avoid all sources of ignition: heat, sparks, open flame. Avoid electro-static discharge. Avoid extreme temperatures.

10.5. Incompatible materials

Substances to avoid:

strong oxidizing agents

10.6. Hazardous decomposition products

Possible thermal decomposition products:
When exposed to high temperatures hazardous decomposition products such as carbon monoxide, carbon dioxide, smoke, oxides of nitrogen may be produced. Flammable vapours.

SECTION 11: Toxicological Information

11.1. Information on toxicological effects

Acute toxicity

Assessment of acute toxicity:
Virtually nontoxic after a single ingestion. The product has not been tested. The statement has been derived from the properties of the individual components.

Irritation

Assessment of irritating effects:
May cause slight irritation to the eyes. The product has not been tested. The statement has been derived from the properties of the individual components.

Experimental/calculated data:
Serious eye damage/irritation: May cause slight irritation to the eyes.

Respiratory/Skin sensitization

Assessment of sensitization:
No applicable information available.

Germ cell mutagenicity

Assessment of mutagenicity:
No applicable information available.

Carcinogenicity

Assessment of carcinogenicity:
No applicable information available.

Reproductive toxicity

Assessment of reproduction toxicity:
No applicable information available.

Developmental toxicity

Assessment of teratogenicity:
No applicable information available.

Specific target organ toxicity (single exposure)

No data available.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:
No applicable information available.

Aspiration hazard

No data available.

Other relevant toxicity information

The product has not been tested. The statement has been derived from the properties of the individual components.

SECTION 12: Ecological Information

12.1. Toxicity

Assessment of aquatic toxicity:
There is a high probability that the product is not acutely harmful to aquatic organisms.

12.2. Persistence and degradability

Assessment biodegradation and elimination (H2O):
Product is not expected to be readily biodegradable.

12.3. Bioaccumulative potential

Assessment bioaccumulation potential:
The product has not been tested.

12.4. Mobility in soil

Assessment transport between environmental compartments:
Volatility: Study technically not feasible.
Adsorption in soil: Due to the product characteristics the test is impossible.

12.5. Results of PBT and vPvB assessment

The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

12.6. Other adverse effects

The product does not contain substances that are listed in Annex I of Regulation (EC) 2037/2000 on substances that deplete the ozone layer.

12.7. Additional information

Adsorbable organically-bound halogen (AOX):
This product contains no organically-bound halogen.

SECTION 13: Disposal Considerations

13.1. Waste treatment methods

Observe national and local legal requirements.

Contaminated packaging:
Completely emptied packagings can be given for recycling.

SECTION 14: Transport Information

Land transport

ADR

	Not classified as a dangerous good under transport regulations
UN number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

RID

	Not classified as a dangerous good under transport regulations
UN number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

Inland waterway transport
ADN

	Not classified as a dangerous good under transport regulations
UN number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user:	None known

Transport in inland waterway vessel
Not evaluated

Sea transport

IMDG

	Not classified as a dangerous good under transport regulations
UN number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

Air transport

IATA/ICAO

	Not classified as a dangerous good under transport regulations
UN number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

14.1. UN number
See corresponding entries for “UN number” for the respective regulations in the tables above.

14.2. UN proper shipping name
See corresponding entries for “UN proper shipping name” for the respective regulations in the tables above.

14.3. Transport hazard class(es)
See corresponding entries for “Transport hazard class(es)” for the respective regulations in the tables above.

14.4. Packing group
See corresponding entries for “Packing group” for the respective regulations in the tables above.

14.5. Environmental hazards
See corresponding entries for “Environmental hazards” for the respective regulations in the tables above.

14.6. Special precautions for user
See corresponding entries for “Special precautions for user” for the respective regulations in the tables above.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Regulation:	Not evaluated
Shipment approved:	Not evaluated
Pollution name:	Not evaluated
Pollution category:	Not evaluated
Ship Type:	Not evaluated

SECTION 15: Regulatory Information

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

Prohibitions, Restrictions and Authorizations

Annex XVII of Regulation (EC) No 1907/2006: Number on List: 69

15.2. Chemical Safety Assessment

Chemical Safety Assessment not required

SECTION 16: Other Information

Assessment of the hazard classes according to UN GHS criteria (most recent version)

Any other intended applications should be discussed with the manufacturer. Corresponding occupational protection measurements must be followed.

Full text of the classifications, including the hazard classes and the hazard statements, if mentioned in section 2 or 3:

Flam. Liq.	Flammable liquids
Acute Tox.	Acute toxicity

STOT SE	Specific target organ toxicity — single exposure
H225	Highly flammable liquid and vapour.
H370	Causes damage to organs (Central nervous system, Optic nerve).
H301 + H311 + H331	Toxic if swallowed, in contact with skin or if inhaled

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

Vertical lines in the left hand margin indicate an amendment from the previous version.