

# Safety data sheet

Page: 1/11

---

BASF Safety data sheet according to UN GHS 4th rev.

Date / Revised: 06.06.2019

Product: **Ultrafuse BVOH**

Version: 1.0

(ID no. 959791/SDS\_GEN\_00/EN)

Date of print 16.11.2019

---

## 1. Identification

### Product identifier

## Ultrafuse BVOH

Recommended use: 3D Printing

### Details of the supplier of the safety data sheet

Company:

BASF 3D Printing Solutions B.V.

Eerste Bokslotweg 17

7821 AT Emmen, Netherlands

Telephone: + 31 591 820 389

E-mail address: sales@basf-3dps.com

### Emergency telephone number

National Poisoning Information Centre: +31 30 – 2748888

Information only for professionals in case of acute intoxication

International emergency number:

Telephone: +49 180 2273-112

---

## 2. Hazards Identification

### Classification of the substance or mixture

According to UN GHS criteria

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

### Label elements

Globally Harmonized System (GHS)

BASF Safety data sheet according to UN GHS 4th rev.  
Date / Revised: 06.06.2019  
Product: **Ultrafuse BVOH**

Version: 1.0

(ID no. 959791/SDS\_GEN\_00/EN)

Date of print 16.11.2019

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

### Other hazards

According to UN GHS criteria

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

---

## 3. Composition/Information on Ingredients

### Substances

Not applicable

### Mixtures

Chemical nature

polymer blend based on: alcohols

Hazardous ingredients (GHS)

According to UN GHS criteria

Methanol

Content (W/W):  $\geq 1\%$  -  $< 3\%$   
CAS Number: 67-56-1  
EC-Number: 200-659-6  
INDEX-Number: 603-001-00-X

Flam. Liq. 2  
Acute Tox. 3 (Inhalation - vapour)  
Acute Tox. 3 (oral)  
Acute Tox. 3 (dermal)  
STOT SE (Central nervous system, Optic nerve)  
1  
H225, H370, H301 + H311 + H331

Specific concentration limit:

STOT SE 2:  $3\%$  -  $< 10\%$   
STOT SE 1:  $\geq 10\%$

For the classifications not written out in full in this section the full text can be found in section 16.

---

## 4. First-Aid Measures

### Description of first aid measures

Remove contaminated clothing.

If inhaled:

---

BASF Safety data sheet according to UN GHS 4th rev.  
Date / Revised: 06.06.2019  
Product: **Ultrafuse BVOH**

Version: 1.0

(ID no. 959791/SDS\_GEN\_00/EN)

Date of print 16.11.2019

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.

### **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.

### **Indication of any immediate medical attention and special treatment needed**

Treatment: Symptomatic treatment (decontamination, vital functions).

---

## **5. Fire-Fighting Measures**

### **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.

### **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.

### **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.

---

## **6. Accidental Release Measures**

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

BASF Safety data sheet according to UN GHS 4th rev.  
Date / Revised: 06.06.2019  
Product: **Ultrafuse BVOH**

Version: 1.0

(ID no. 959791/SDS\_GEN\_00/EN)

Date of print 16.11.2019

### **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.

### **Environmental precautions**

Do not discharge into drains/surface waters/groundwater.

### **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.

---

## **7. Handling and Storage**

### **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.

### **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.

---

## **8. Exposure Controls/Personal Protection**

### **Control parameters**

#### Components with occupational exposure limits

67-56-1: Methanol

### **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)

---

 BASF Safety data sheet according to UN GHS 4th rev.

Date / Revised: 06.06.2019

Version: 1.0

Product: **Ultrafuse BVOH**

(ID no. 959791/SDS\_GEN\_00/EN)

Date of print 16.11.2019

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.

---

## 9. Physical and Chemical Properties

**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:		
Flash point:	The product is a non-volatile solid. > 200 °C	(closed cup)
Evaporation rate:		
Flammability:	The product is a non-volatile solid. not highly flammable	
Lower explosion limit:		
Upper explosion limit:	For solids not relevant for classification and labelling.	
Ignition temperature:	For solids not relevant for classification and labelling. 440 °C	
Vapour pressure:		
Relative density:	No data available.	
Relative vapour density (air):	Study does not need to be conducted.	
Solubility in water:	The product is a non-volatile solid. completely soluble	

BASF Safety data sheet according to UN GHS 4th rev.  
Date / Revised: 06.06.2019  
Product: **Ultrafuse BVOH**

Version: 1.0

(ID no. 959791/SDS\_GEN\_00/EN)

Date of print 16.11.2019

Solubility (qualitative) solvent(s): N,N-Dimethylformamide, Dimethyl sulfoxide  
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

### Other information

Bulk density: approx. 1.140 kg/m<sup>3</sup>

---

## 10. Stability and Reactivity

### Reactivity

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

### Chemical stability

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

### Possibility of hazardous reactions

The product is not a dust explosion risk as supplied; however the build-up of fine dust can lead to a risk of dust explosions.

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

### Conditions to avoid

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

### Incompatible materials

Substances to avoid:  
strong oxidizing agents

### 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.

---

## 11. Toxicological Information

### 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.

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.

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

Assessment of repeated dose toxicity:

No applicable information available.

#### Other relevant toxicity information

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

---

## 12. Ecological Information

### Toxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms.

### Persistence and degradability

Assessment biodegradation and elimination (H<sub>2</sub>O):

Product is not expected to be readily biodegradable.

### Bioaccumulative potential

Assessment bioaccumulation potential:

The product has not been tested.

### 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.

### 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.

### Additional information

Adsorbable organically-bound halogen (AOX):

This product contains no organically-bound halogen.

---

## 13. Disposal Considerations

### Waste treatment methods

Observe national and local legal requirements.

Contaminated packaging:

Completely emptied packaging can be given for recycling.

---

## 14. Transport Information



---

BASF Safety data sheet according to UN GHS 4th rev.

Date / Revised: 06.06.2019

Version: 1.0

Product: **Ultrafuse BVOH**

(ID no. 959791/SDS\_GEN\_00/EN)

Date of print 16.11.2019

---

**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

BASF Safety data sheet according to UN GHS 4th rev.  
 Date / Revised: 06.06.2019  
 Product: **Ultrafuse BVOH**

Version: 1.0

(ID no. 959791/SDS\_GEN\_00/EN)

Date of print 16.11.2019

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

### **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

## **15. Regulatory Information**

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

Not applicable

## **16. Other Information**

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

Full text of classifications, hazard symbols and 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

---

BASF Safety data sheet according to UN GHS 4th rev.

Date / Revised: 06.06.2019

Product: **Ultrafuse BVOH**

Version: 1.0

(ID no. 959791/SDS\_GEN\_00/EN)

Date of print 16.11.2019

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.