

# Safety data sheet

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BASF Safety data sheet according to UN GHS 4th rev. Date / Revised: 20.04.2020 Product: Ultrafuse® ABS Fusion+ Black

Version: 1.0

(ID no. 995585/SDS\_GEN\_00/EN)

Date of print 05.01.2021

# 1. Identification

**Product identifier** 

# Ultrafuse® ABS Fusion+ Black

Recommended use: 3D Printing, for industrial use only

# Details of the supplier of the safety data sheet

Company: BASF 3D Printing Solutions B.V. Eerste Bokslootweg 17 7821 AT Emmen, Netherlands

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

**Emergency telephone number** 

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)

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

<u>Contact address:</u> BASF SE 67056 Ludwigshafen GERMANY

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### 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

Hazardous ingredients (GHS) According to UN GHS criteria

No particular hazards known.

# 4. First-Aid Measures

#### **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

Skin contact with hot molten substance/product may cause thermal burns. Areas affected by molten material should be quickly placed under cold running water. Solidified product should not be pulled from the skin. Burns caused by molten material require hospital treatment.

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

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Symptoms: (Further) symptoms and / or effects are not known so far

**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: water spray, foam, dry powder, Dry sand

#### Special hazards arising from the substance or mixture

nitrogen oxides, carbon oxides The substances/groups of substances mentioned can be released in case of fire.

#### 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

**Personal precautions, protective equipment and emergency procedures** No special precautions necessary.

#### **Environmental precautions**

Do not discharge into drains/surface waters/groundwater. Contain contaminated water/firefighting water.

# Methods and material for containment and cleaning up

For small amounts: Sweep/shovel up. For large amounts: Sweep/shovel up. Vacuum up spilled product. Reclaim for processing if possible. Ensure adequate ventilation. Avoid raising dust.

# 7. Handling and Storage

### Precautions for safe handling

Avoid the formation and deposition of dust. Avoid inhalation of dusts/mists/vapours. Ensure adequate ventilation. Provide suitable exhaust ventilation at the drying process and in the area surrounding the melt outlet of processing machines.

Protection against fire and explosion:

The product is not an oxidizer, not self-combustible and not explosive.

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### Conditions for safe storage, including any incompatibilities

Suitable materials for containers: High density polyethylene (HDPE), Low density polyethylene (LDPE), Paper/Fibreboard Further information on storage conditions: Containers should be stored tightly sealed in a dry place.

#### Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

# 8. Exposure Controls/Personal Protection

#### **Control parameters**

Components with occupational exposure limits

No occupational exposure limits known.

#### Exposure controls

Personal protective equipment

Respiratory protection:

Breathing protection if breathable aerosols/dust are formed. Wear respiratory protection if ventilation is inadequate. Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P2 or FFP2)

Hand protection: Wear refractive gloves while working with the hot melt.

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.

<u>General safety and hygiene measures</u> Hands and/or face should be washed before breaks and at the end of the shift.

# 9. Physical and Chemical Properties

#### Information on basic physical and chemical properties

Form:	filament
Colour:	black
Odour:	odourless
Odour threshold:	
	not applicable, odour not perceivable

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pH value:	not soluble
Melting point: Boiling point:	> 114 °C
Flash point:	not applicable
Evaporation rate:	not applicable, the product is a solid
Flammability: Lower explosion limit:	The product is a non-volatile solid. not flammable
·	For solids not relevant for classification and labelling.
Upper explosion limit:	For solids not relevant for classification and labelling.
Vapour pressure:	(20 °C)
Relative vapour density (	negligible air): The product is a non-volatile solid.
Solubility in water: Partitioning coefficient n-	negligible octanol/water (log Kow): not applicable for mixtures
Self ignition:	not self-igniting
Thermal decomposition:	Gaseous products of degradation can be given off if the product is greatly overheated.
Viscosity, dynamic:	
Viscosity, kinematic:	not applicable, the product is a solid
Fire promoting properties	not applicable, the product is a solid not fire-propagating
Other information	
Self heating ability:	It is not a substance capable of spontaneous heating.

Bulk density: 1.075 kg/m3 (20 °C) Miscibility with water: immiscible

# 10. Stability and Reactivity

#### Reactivity

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

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Corrosion to metals: No corrosive effect on metal.

#### **Chemical stability**

Stable under normal conditions.

#### Possibility of hazardous reactions

No hazardous reactions when stored and handled according to instructions.

#### Conditions to avoid

Avoid extreme temperatures. Avoid UV-light and other radiation with high energy.

#### Incompatible materials

Substances to avoid: oxidizing agents, acids, bases

#### Hazardous decomposition products

Thermal decomposition products: Acrylonitrile, Styrene nitrogen oxides, carbon oxides

# **11. Toxicological Information**

### Information on toxicological effects

#### Acute toxicity

Assessment of acute toxicity: Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact.

Experimental/calculated data: ATE (oral): > 5.000 mg/kg

ATE (by inhalation): > 20 mg/l 4 h Determined for vapor

ATE (dermal): > 5.000 mg/kg

Irritation

Assessment of irritating effects: Not irritating to eyes and skin.

Respiratory/Skin sensitization

Assessment of sensitization:

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Based on available Data, the classification criteria are not met.

#### Germ cell mutagenicity

Assessment of mutagenicity: Not classified, due to lack of data.

#### Carcinogenicity

Assessment of carcinogenicity: Not classified, due to lack of data.

Reproductive toxicity

Assessment of reproduction toxicity: Not classified, due to lack of data.

#### **Developmental toxicity**

Assessment of teratogenicity: Not classified, due to lack of data.

Specific target organ toxicity (single exposure)

Assessment of STOT single: Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

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

Assessment of repeated dose toxicity: Not classified, due to lack of data.

Aspiration hazard

No aspiration hazard expected.

#### Other relevant toxicity information

The product has not been tested. The statement has been derived from the properties of the individual components. The product has been assessed on the basis of the components' available data. To some extent data gaps exist for individual components. According to our present knowledge and experience dangers which are not covered by the current labeling are not to be expected.

# **12. Ecological Information**

Toxicity

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Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms. Based on long-term (chronic) toxicity study data, the product is very likely not harmful to aquatic organisms.

# Persistence and degradability

Assessment biodegradation and elimination (H2O): Product is not expected to be readily biodegradable. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

#### **Bioaccumulative potential**

Assessment bioaccumulation potential: The product has not been tested.

#### Mobility in soil

Assessment transport between environmental compartments: Adsorption in soil: Adsorption to solid soil phase is expected.

# Results of PBT and vPvB assessment

The product does not fulfill the criteria for PBT (Persistent/bioaccumulative/toxic) and vPvB (very persistent/very bioaccumulative).

# 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

Other ecotoxicological advice:

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. The product has been assessed on the basis of the components' available data. To some extent data gaps exist for individual components. According to our present knowledge and experience dangers which are not covered by the current labeling are not to be expected.

# **13. Disposal Considerations**

#### Waste treatment methods

Dispose of in accordance with national, state and local regulations. Contact specialized companies about recycling.

Contaminated packaging: Dispose of in accordance with national, state and local regulations.

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Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

# 14. Transport Information

#### Land transport

#### ADR

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

<u>Transport in inland waterway vessel</u> Not evaluated

### Sea transport

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#### IMDG

user

UN number:

Packing group:

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

#### 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**

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.

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