

Safety data sheet

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

Date / Revised: 20.04.2020

Version: 1.0

Product: **Ultrafuse® ABS Fusion+ Grey**

(ID no. 995371/SDS_GEN_00/EN)

Date of print 05.01.2021

1. Identification

Product identifier

Ultrafuse® ABS Fusion+ Grey

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 Bokslotweg 17
7821 AT Emmen, Netherlands

Contact address:

BASF SE
67056 Ludwigshafen
GERMANY

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.

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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.

General safety and hygiene measures

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:	grey
Odour:	odourless
Odour threshold:	not applicable, odour not perceivable

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

Other information

Self heating ability:	It is not a substance capable of spontaneous heating.
Bulk density:	1.075 kg/m ³ (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

	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

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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

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.