

Safety data sheet

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BASF 3D Printing Safety data sheet

Date / Revised: 03.03.2020

Version: 1.0

Product: **Ultrafuse® ABS nat.-acrylonitrile butadiene styrene filament**

(11120801/SDS_GEN_SG/EN)

Date of print 09.01.2023

1. Substance/preparation and manufacturer/supplier identification

Ultrafuse® ABS nat.-acrylonitrile butadiene styrene filament

Recommended use: 3D Printing, for industrial use only

Manufacturer/supplier:

BASF 3D Printing Solutions B.V.

Eerste Bokslootweg 17

7821 AT Emmen, Netherlands

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Emergency information:

Singapore Emergency Toll-Free Number:

Telephone: 1800-723-1361

International emergency number:

Telephone: +49 180 2273-112

2. Hazard identification

Classification of the substance and mixture:

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

Label elements and precautionary statement:

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

Other hazards which do not result in classification:

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

3. Composition/information on ingredients

Chemical nature

Polymer

No particular hazards known.

4. First-Aid Measures

General advice:

Remove contaminated clothing.

If inhaled:

Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary. If symptoms persist, seek medical advice.

On skin contact:

Wash thoroughly with soap and water. Burns caused by molten material require hospital treatment. If irritation develops, seek medical attention.

On contact with eyes:

In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. If irritation develops, seek medical attention.

On ingestion:

Rinse mouth and then drink 200-300 ml of water. Do not induce vomiting. Seek medical attention.

Note to physician:

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

Hazards: No hazard is expected under intended use and appropriate handling.

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Suitable extinguishing media:

water spray, foam, dry powder

Specific hazards:

acrylonitrile, styrene, fumes/smoke, carbon oxides, nitrogen oxides

Traces of the substances/groups of substances mentioned can be released in case of fire or upon excessive heat.

Special protective equipment:

Wear a self-contained breathing apparatus.

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Further information:

Dusty conditions may ignite explosively in the presence of an ignition source causing flash fire.

6. Accidental Release Measures

Personal precautions:

No special precautions necessary.

Environmental precautions:

Do not allow to enter soil, waterways or waste water channels.

Methods for cleaning up or taking 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. After decontamination, spill area can be washed with water.

Additional information: Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Avoid the formation and build-up of dust - danger of dust explosion. Dust in sufficient concentration can result in an explosive mixture in air. Handle to minimize dusting and eliminate open flame and other sources of ignition.

7. Handling and Storage

Handling

Avoid inhalation of dusts/mists/vapours. Ensure adequate ventilation. Provide suitable exhaust ventilation at drying process and in the surrounding of processing machines. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Avoid the formation and deposition of dust.

Protection against fire and explosion:

Avoid dust formation. Dust in sufficient concentration can result in an explosive mixture in air. Handle to minimize dusting and eliminate open flame and other sources of ignition. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.

Storage

Further information on storage conditions: Keep container tightly closed. Avoid extreme heat. Avoid all sources of ignition: heat, sparks, open flame.

Storage stability:

Avoid prolonged storage.

8. Exposure controls and personal protection

Components with occupational exposure limits

No occupational exposure limits known.

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 chemical resistant protective gloves.

Eye protection:

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

Body protection:

Standard work clothes and shoes.

General safety and hygiene measures:

Wear protective clothing to prevent contact during mechanical processing and/or hot melt conditions. After use of gloves apply skin-cleaning agents and skin cosmetics.

9. Physical and Chemical Properties

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

pH value:	not determined
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Melting point:	not determined
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Boiling point:	not applicable
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Flash point:	not applicable
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Evaporation rate:	The product is a non-volatile solid.
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Flammability (solid/gas):	not flammable
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Lower explosion limit:	For solids not relevant for classification and labelling.
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Upper explosion limit:	For solids not relevant for classification and labelling.
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Ignition temperature:	not determined
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Thermal decomposition: > 300 °C

Self ignition: not self-igniting

Self heating ability: It is not a substance capable of spontaneous heating.

Fire promoting properties: not fire-propagating

Radioactivity:

not radioactive for transport purposes

Vapour pressure:

not applicable

Relative density: 1.05 - 1.07
(25 °C)Relative vapour density (air):
not applicable

Solubility in water: negligible

Partitioning coefficient n-octanol/water (log Pow):
not applicable for mixtures

Viscosity, dynamic:

not applicable, the product is a solid

Viscosity, kinematic:

not applicable, the product is a solid

10. Stability and Reactivity

Conditions to avoid:

Temperature: > 300 °C

Prolonged exposure to elevated temperatures may result in exothermic decomposition accompanied by a pressure build-up in sealed containers. Avoid all sources of ignition: heat, sparks, open flame.

Thermal decomposition: > 300 °C

Substances to avoid:

oxidizing agents

Corrosion to metals: No corrosive effect on metal.

Hazardous reactions:

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

Hazardous decomposition products:

acrylonitrile, styrene

monomers, gases/vapours, oxides, hydrocarbons

11. Toxicological Information

Acute toxicity

Assessment of acute toxicity:

Contact with molten product may cause thermal burns. Virtually nontoxic after a single skin contact. Virtually nontoxic by inhalation. 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 skin. May cause slight irritation to the eyes. May cause slight irritation to the respiratory tract.

Respiratory/Skin sensitization

Assessment of sensitization:

A sensitizing effect on particularly sensitive individuals cannot be excluded.

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 available Data, the classification criteria are not met.

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

Assessment of repeated dose toxicity:

The information available on the product provides no indication of toxicity on target organs after repeated exposure.

Aspiration hazard

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No aspiration hazard expected.

12. Ecological Information

Ecotoxicity

Assessment of aquatic toxicity:

The product has not been tested. The statement has been derived from the structure of the product. There is a high probability that the product is not acutely harmful to aquatic organisms.

Mobility

Assessment transport between environmental compartments:

Adsorption to solid soil phase is possible.

Bioaccumulation potential

Bioaccumulation potential:

The product will not be readily bioavailable due to its consistency and insolubility in water.

Additional information

Other ecotoxicological advice:

The product has been assessed on the basis of the components' available data. To some extent data gaps exist for individual components.

13. Disposal Considerations

Must be disposed of or incinerated in accordance with local regulations.

A waste code in accordance with the European waste catalog (EWC) cannot be specified, due to dependence on the usage.

The waste code in accordance with the European waste catalog (EWC) must be specified in cooperation with disposal agency/manufacturer/authorities.

Contaminated packaging:

Packs that cannot be cleaned should be disposed of in the same manner as the contents.

Uncontaminated packaging can be re-used.

14. Transport Information

Domestic transport:

Not classified as a dangerous good under transport regulations

Sea transport

IMDG

Not classified as a dangerous good under transport regulations

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Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory Information

Other regulations

16. Other Information

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

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.