



MATERIAL SAFETY DATA SHEET

extrudr ABS

1. PRODUCT IDENTIFICATION

1.1 PRODUCT IDENTIFIER

TRADE NAME Extrudr ABS

1.2 MANUFACTURER

ADDRESS FD3D GmbH/Extrudr
Höchsterstraße 81
A-6972 Fußach

EMAIL info@extrudr.eu

1.3 USE OF PRODUCT

Acrylonitrile, 1.3 Butadiene, and Styrene Co-polymer, suitable for 3D printing filament

2. HAZARD IDENTIFICATION

FLAMMABILITY 1/16' HB (UL-94, File No. E-6717M)

EXTINGUISHING MEDIA Usually use water and use extinguishing media appropriate to surrounding conditions.

SPECIAL FIRE FIGHTING PROCEDURE Cool Containers with water spray. In closed stores, provide fire fighter with self-contained breathing apparatus in positive pressure mode.

USUAL FIRE AND EXPLOSION HAZARDS Irritating gases and dense smoke.

3. COMPOSITION

CHEMICAL CHARACTERISTICS ABS (Acrylonitrile-Butadiene Styrene) - 98%; Typical Anti-oxidants - 1%; Typical Lubricants - 1%.

ADDITIONAL INFORMATION No harmful ingredients

4. FIRST-AID MEASURES

ON SKIN CONTACT	Essentially nonirritating to skin but rinse with copious water.
AFTER INHALATION	In case of breathing, fumes released from heated material may cause respiratory irritation. In case of inhaling dense smoke, immediately remove a person to fresh air. If necessary, apply artificial respiration and seek medical attention immediately.
ON INGESTION	If vomiting occurs, lower the head to ease vomiting and seek for medical advice.
ON EYES CONTACT	Immediately rinse eyes with copious amount of running water and seek medical advice.

5. FIRE-FIGHTING MEASURES

SUITABLE FIRE EXTINGUISHING MEDIA	Usually use water and use extinguishing media appropriate to surrounding conditions.
SPECIAL EXPOSURE HAZARDS	Irritating gases and dense smoke.
SPECIAL PROTECTIVE EQUIPMENT	Cool Containers with water spray. In closed stores, provide fire fighter with self-contained breathing apparatus in positive pressure mode.
REMARK	Accumulations of dust can be inflammable.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS	Use suitable protective clothing. Avoid eye contact and inhalation of dusts. Keep ignition sources away.
METHODS FOR CLEANING UP	Sweep up material and place in a container, risk of slipping. Avoid ingress of material into drainage systems.

7. HANDLING AND STORAGE

HANDLING	Avoid contact with molten polymer. Avoid generation of dust and electrostatic charge.
STORAGE	Protect against moisture and UV radiation. Store cool and keep packaging closed when not in use. Avoid sources of ignition.

8. PERSONAL PROTECTION

TECHNICAL SAFETY MEASURES	With suitable ventilation the threshold limits assumably will not be reached. Avoid electrostatic charge by use of grounding cables.
PERSONAL SAFETY EQUIPMENT	Use adequate safety equipment, e.g. protective clothing, eye protection glasses, heat protection gloves. In case of dust formation wear mask with particle filter.
WORK HYGIENE	No eating or drinking during working. Avoid contact of hot material with the skin. Avoid breathing dust and vapours.

9. PHYSICAL AND CHEMICAL PROPERTIES

FORM	Filament
COLOR	colored
MELTING RANGE	150–210°C
OXIDISING PROPERTIES	not self igniting / flammable
DENSITY	1.05 g/cm ³

10. STABILITY AND REACTIVITY

STABILITY	The product is stable at recommended storage conditions.
CONDITIONS TO BE AVOIDED	Avoid fire and exposure to extreme heat above (60°C) and all sources of ignition. Thermal decomposition >250°C.
SUBSTANCES TO BE AVOIDED	Strong oxidising agents.
HAZARDOUS DECOMPOSITION PRODUCTS	Carbon monoxide, carbon dioxide, aldehydes, acetic acid, tetrahydrofurane, low molecular weight oligomers.

11. TOXICOLOGICAL INFORMATION

LOCAL IRRITATION	Dust can cause irritation of eyes, respiratory organs and skin. After ingestion stomach pain or nausea are possible.
OTHER REMARKS	Based on our state of knowledge and experience no injurious health effects are expected if product is properly handled for the designated use.

12. ECOLOGICAL INFORMATION

ECOTOXICAL EFFECTS	No negative ecological effects known at the present state of knowledge, test results are not available. Due to insolubility in water most probably not hazardous to aquatic organisms.
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13. DISPOSAL CONSIDERATIONS

PRODUCT Generation of waste should be minimised, check possibility for recycling.

14. TRANSPORT INFORMATION

TRANSPORT REGULATIONS Not classified as hazardous under transport regulations ADR, ADNR, RID, ICAO/IATA, IMDG/GGVSee.

15. REGULATORY INFORMATION

EU REGULATIONS No Information.

16. OTHER INFORMATION

This data is based on the current state of our information and experience. This safety data sheet describes our product in terms of safety requirements. Preceding data is not applicable as a warranty of product properties. It is the responsibility of the recipient to observe the existing legal regulations for the use of this product.