

# MATERIAL SAFETY DATA SHEET GreenTEC Pro

# 1. PRODUCT IDENTIFICATION

TRADE NAME Extrudr GreenTEC Pro

MANUFACTURER FD3D GmbH Klosterstrasse 13 6923 Lauterach AUSTRIA info@extrudr.com

USE OF PRODUCT Biodegradable polymer compund, suitable for 3D printing filament

# 2. HAZARD IDENTIFICATION

| CLASSIFICATION            | No need for classification according to GHS criteria for this product (accor-<br>ding to Regulation (EC) No. 1272/2008 [CPL]).              |
|---------------------------|---|
| LABEL ELEMENTS            | According to Regulation (EC) No. 1272/2008 (CLP) this product does not re-<br>quire a hazard warning label in accordance with GHS criteria. |
| SPECIAL ADVICE ON HAZARDS | Danger of burns in contact with hot polymer. Hazardous vapours in case of burning.  |

## 3. COMPOSITION

CHEMICAL CHARACTERISTICS Biodegradable batch based on PLA, contains copolyester and additives.

ADDITIONAL INFORMATION No harmful ingredients

## 4. FIRST-AID MEASURES

| ON SKIN CONTACT  | In case of contact with molten polymer immediately cool the skin with cold water. Medical aid may be required to remove adhering material and for treatment of burns. |
|------------------|---|
| AFTER INHALATION | After inhalation of decomposition gases or dust remove patient to fresh air.<br>Contact a doctor in case of discomfort.   |
| ON INGESTION     | No effects known. Rinse mouth with water and drink more water. Contact a doctor in case of discomfort.  |
| ON EYES CONTACT  | Rinse open eyes thoroughly with water.  |

# 5. FIRE-FIGHTING MEASURES

| FIRE EXTINGUISHING MEDIA     | Water, dry chemical extinguisher, foam, carbon dioxide.  |
|------------------------------|--|
| SPECIAL EXPOSURE HAZARDS     | During incomplete combustion release of carbon monoxide, tetrahydrofura-<br>ne, acetic acid and decomposition products possible. |
| SPECIAL PROTECTIVE EQUIPMENT | Self-contained breathing apparatus.  |
| REMARK                       | Accumulations of dust can be inflammable.  |

# 6. ACCIDENTIAL RELEASE MEASURES

| PERSONAL PRECAUTIONS | Use suitable protective clothing. Avoid eye contact and inhalation of dusts.<br>Keep ignition sources away.    |
|----------------------|--|
| METHODS FOR CLEANING | 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 electros-<br>tatic 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.<br>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 hotmaterial with the skin. Avoid breathing dust and vapours.  |

#### 9. PHISICAL AND CHEMICAL PROPERTIES

| FORM                 | Filament                      |
|----------------------|-------------------------------|
| COLOR                | colored                       |
| MELTING RANGE        | 190-210°C                     |
| OXIDISING PROPERTIES | not self igniting / flammable |
| DENSITY              | 1.39g/cm³                     |
|                      |                               |

# 10. STABILITY AND REACTIVITY

| STABILITY                        | The product is stable at recommended storage contidions.  |
|----------------------------------|---|
| SUBSTANCES TO BE AVOIDED         | Strong oxidizing agents.  |
| HAZARDOUS DECOMPOSITION PRODUCTS | Carbon monoxide, carbon dioxide, aldehydes, acetic acid, tetrahydrofurane,<br>low molecular weight oligomers. |

## 11. TOXOLOGICAL 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,<br>test results are not available. Due to insolubility in water most probably not<br>hazardous to aquatic organisms. |
|------------------------|--|
| BIOLOGICAL DEGRADATION | Product is biodegradable, in accordance with EN 13432.   |
| BIOACCUMULATION        | Due to its consistency and insolubility in water biological accumulation is not expected.  |

# 13. DISPOSAL CONSIDERATIONS

PRODUCT Generation of waste should be minimised, check possibility for recycling. Waste product can be incinerated or dumped together with domestic waste in compliance with local authority requirements.

## 14. TRANSPORT INFORMATION

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

## 15. REGULATORY INFORMATION

EU REGULATIONS This product does not require a hazard warning label in accordance with EC Directives.

WATER EXPOSURE CLASS (GERMANY) nwg', no risk of water pollution (classification acc. Att. 1 of VwVwS)

## 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.