



# MATERIAL SAFETY DATA SHEET

## PCTG

### 1. PRODUCT IDENTIFICATION

TRADE NAME	Extruder PCTG
MANUFACTURER	FD3D GmbH Klosterstrasse 13 6923 Lauterach AUSTRIA  info@extruder.com
USE OF PRODUCT	PCTG Copolyester, suitable for 3D printing filament

### 2. HAZARD IDENTIFICATION

CLASSIFICATION	No need for classification according to GHS criteria for this product (according to Regulation (EC) No. 1272/2008 [CPL]).
LABEL ELEMENTS	According to Regulation (EC) No. 1272/2008 (CLP) this product does not require 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	The polymer contains minor additives such as stabilizers and catalysts. These additives are immobilized by the polymer and are not released with normal use.
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### 4. FIRST-AID MEASURES

ON SKIN CONTACT	Cool skin rapidly with cold water after contact with molten polymer. Do not peel polymer from the skin and obtain medical attention if necessary.
ON INGESTION	No effects known. Flush mouth with water and drink water. Get medical attention if symptoms occur.
AFTER INHALATION	Do not induce vomiting unless directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.
ON EYES CONTACT	Immediately flush eyes with plenty of water for at least 20 minutes. Get medical attention if symptoms occur.

## 5. FIRE-FIGHT MEASURES

FIRE EXTINGUISHING MEDIA	Water, dry chemical extinguisher, foam, carbon dioxide.
SPECIAL EXPOSURE HAZARDS	Carbon monoxide, carbon dioxide, acetaldehyde.
SPECIAL PROTECTIVE EQUIPMENT	Wear self-contained breathing apparatus, protective clothing and headgear to prevent contact with skin and eyes.

## 6. ACCIDENTIAL RELEASE MEASURES

PERSONAL PRECAUTIONS	Use suitable protective clothing. Avoid eye contact and inhalation of dusts. Keep ignition sources away.
METHODS FOR CLEANING	Sweep up material with suitable tools 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	250-270°C
OXIDISING PROPERTIES	not self igniting / flammable
DENSITY	1.21g/cm <sup>3</sup>

## 10. STABILITY AND REACTIVITY

STABILITY	The product is stable at recommended storage conditions.
CONDITIONS TO BE AVOIDED	Avoid exposure to extreme heat and all sources of ignition. Thermal decomposition > 250 °C.
SUBSTANCES TO BE AVOIDED	Acetic anhydride, acetone, aniline, benzene, chloroform, chromic acid, cyclohexanone, dimethylformamide, dioxane, ethyl acetate, phenol, tetrahydrofuran. Contact with strong oxidizing agents, strong acids and caustics will decompose the polyester.
HAZARDOUS DECOMPOSITION PRODUCTS	Carbon monoxide, carbon dioxide, acetaldehyde.

## 11. TOXICOLOGICAL INFORMATION

LOCAL IRRITATION	No known significant effects or critical hazards.
OTHER REMARKS	No known significant effects or critical hazards.

## 12. ECOLOGICAL INFORMATION

ECOTOXICAL EFFECTS	not available
BIOLOGICAL DEGRADATION	not available
BIOACCUMULATION	No known significant effects or critical hazards.

## 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.
SPECIAL PRECAUTIONS	Do not dump into any sewers, on the ground, or into any body of water. All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations.

## 14. TRANSPORT INFORMATION

TRANSPORT REGULATIONS	Not a dangerous good in the sense of the transport regulations ADR / RID, DOT, IATA, IMDG.
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## 15. REGULATORY INFORMATION

EU REGULATIONS Safety, health and environmental regulations/legislation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH)

## 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.