**Safety Data Sheet** according to Reg. (EU) No 2015/830 (REACH)

Commission Regulation (EU) No 830/2015 of 20 May 2015 and revised by Regulation (EU) 2020/878

Product name: **PETG**
Print date: June 1, 2024 Revision number: 23 Revised on: June 1, 2024

## 1. Substance/Preparation and Company Name

Product name: **PETG**

PETG
Relevant identified uses of the substance or mixture and uses advised against
Will be. Identified uses: Plastic material for 3D printing applications.

Manufacturer : **CR-3D**
Saliterstraße 25
93413 Cham
Emergency number: 09971 / 89 74 57 – 3

## 2. Composition / Information on ingredients

| Substance Name | Concentration |
|---|---|
| Copolyester | > 99.9 |
| Additives | < 0.1 |

The polymer contains minor additives, such as stabilizers and catalysts.
These additives are immobilized by the polymer and are not released during normal use.

**Additional Information:**
PETG is not known to **have any** endocrine-damaging properties.

## 3. Potential dangers

**Classification of the substance or mixture**
The product is not classified as hazardous according to Regulation (EC) No 1272/2008 (CLP/GHS) and Directive 67/548/EEC.

**Identification elements**
Hazard pictogram: None
Signal word: None
Hazard warnings: None
Safety instructions: Not applicable

**Other hazards**
The hazards associated with this product are primarily related to its handling. Liquid polymers can cause burns. Polymer dust, in sufficient concentrations near ignition sources, can pose a fire hazard.

## 4. First aid measures

Inhalation: Inhaling dust or fumes from overheating or
For burns, move the affected person to fresh air. Consult a doctor after severe exposure.

Skin contact: After skin contact with liquid polymer, rinse the skin thoroughly with cold water. Do not peel the polymer off the skin. Consult a doctor .

Eye contact: Immediately rinse eyes thoroughly with plenty of water for at least 20 minutes. Consult a doctor if symptoms occur.

Ingestion: Do not induce vomiting except on explicit instructions from medical personnel. Never give anything to an unconscious person by the mouth. If symptoms occur, seek medical advice and show the technical data sheet.

**Information on immediate medical assistance or special treatment**

| | |
|---|---|
| Instructions for the physician: | Treat symptomatically. If larger quantities are swallowed or inhaled, contact a poison control specialist immediately. |
| Special treatments: | No special treatments |

## 5. Firefighting measures

| | |
|---|---|
| Suitable extinguishing agents: | Use an extinguishing agent that is also suitable for local and surrounding conditions. Water mist, chemical dry powder, and carbon dioxide. |
| Unsuitable extinguishing agents: | Do not use water if the fire was caused by an electrical short circuit. |

**Special hazards arising from the substance and mixture**

| | |
|---|---|
| Dangerous combustion products: | carbon monoxide, carbon dioxide, and acetaldehyde |

**Instructions for fire fighting**

| | |
|---|---|
| Unusual fire and explosion hazard: | Powdered materials can form explosive dust-air mixtures. Charging or discharging of high-voltage static electricity must be avoided when large quantities of powdered materials are present. |

**Special protective equipment for firefighting**

Firefighters should wear appropriate protective clothing and self-contained breathing apparatus with full face protection to prevent eye and skin contact.

## 6. Measures to be taken in case of accidental release

**For people who are not emergency responders:** Put on appropriate personal protective equipment. Spilled substance can be slippery. Clean up any spills. The liquid polymer may remain hot for some time due to its low thermal conductivity. Exercise caution when disposing of any molten material. Do not inhale any fumes or vapors that may be released during handling.

**For first responders in emergencies:** If special clothing is required to handle the spilled substance, the information in Section 8 regarding suitable and unsuitable materials must be observed. See also the information in "For persons who are not rescue workers".

**Environmental protection measures:** Prevent the spread of released material into the soil, waterways, drains, and sewage pipes. Notify the relevant authorities if the product has caused environmental pollution (sewerage pipes, waterways, soil, or air).

**Methods and materials for containment and purification**

**Released material:** Vacuum or sweep up the material and dispose of it in a container suitable for recycling or disposal. Avoid dust formation.

**References to sections:** See section 1 for emergency contact information.
See section 8 for information regarding appropriate personal protective equipment.
See section 13 for further information on waste treatment.

## 7. Handling and storage

The information in this section contains general advice and guidance. The list of identified uses in Section 1 should be consulted for each application-specific piece of information in the exposure scenario(s).

**Protective measures, advice on general occupational hygiene**

Put on appropriate personal protective equipment (see section 8).
Adequate ventilation and cleanliness must be ensured in the work area.
The work area must be monitored using established workplace hygiene procedures. Dust accumulation can pose a fire or explosion hazard at sufficient concentrations. Remove all ignition sources. Beware of electrostatic discharge.

**Conditions for safe storage, taking into account incompatibilities**
Keep the container tightly closed until ready to use. Store in the original container in a dry, cool, and well-ventilated place, away from flames, ignition sources, direct sunlight, or incompatible substances (see section 10). Practice good household management to control dust accumulation.

**Specific applications**
Recommendations: Not available

Specific solutions for the industrial sector: Not Available

## 8. Exposure limits and personal protective equipment

**Parameters to be monitored**
Workplace exposure limits: No exposure limits are known.

**Exposure limitation and monitoring:**
Suitable technical equipment should be used. Good general ventilation should be ensured.
Control devices: Ensure adequate ventilation and dust extraction at the machine.

**Personal protective measures/hygiene measures**
Eye/face protection: Wash your hands thoroughly before meals and at the end of the workday. Not required under normal conditions of use. If there is a risk of exposure, safety goggles should be worn. Recommended: Safety goggles with side shields when working with liquid material.

Hand protection: Wearing gloves is required when handling hot polymer.

Other skin protection: Suitable footwear and additional skin protection measures based on the task to be performed and the associated risks
choose the associated dangers and before handling this
Have the product approved by a professional. A safety shower and washing facilities must be provided.

Respiratory protection: Not required under normal operating conditions. If respirable dusts and/or combustion gases are present, respiratory protection is required.
Use a self-contained breathing apparatus.
When respiratory protective equipment is used, a program must be in place.
be set up to meet the OSHA standard
(OSHA Respiratory Protection Program Guidelines) to ensure compliance.

## 9. Physical and chemical properties

Look
Form: Filament for 3D printing
Color: Colorless or after dyeing
Odor: Faint
pH value : Not applicable
Boiling point : Not applicable
Flash point: Not applicable
Evaporation rate: Not applicable
Flammability : Non-flammable
Vapor pressure: Not available
Vapor density: Not available
Relative density: 1.27
Solubility: Insoluble in water

## 10. Stability and reactivity

Reactivity: No specific data regarding the reactivity of this product or its ingredients are available.

Chemical stability: The product is stable.

Possibility of dangerous reactions: Under normal storage conditions and normal use, no dangerous reactions occur.

Conditions to avoid: No specific data.

Incompatible materials: Acetic anhydride, acetone, aniline, benzene, chloroform, Chromic acid, cyclohexanone , dimethylformamide , dioxane Ethyl acetate, phenol, and tetrahydrofuran. Reactive with strong volatiles.
Oxidizing agents and strong acids and alkalis decompose polyester.

Dangerous decomposition products: carbon monoxide, carbon dioxide, and acetaldehyde

## 11. Information on toxicological effects

Inhalation: Combustion products can be irritating; High Dust concentration can be irritating to the respiratory tract.

Swallowing: There is said to be a slight risk of swallowing.

Skin contact: May cause burns/irritation to the skin upon skin contact. The liquid polymer will adhere to the skin and cause deep burns.

Eye contact: May cause eye damage/irritation upon eye contact.

**Information on toxicological effects**

Inhalation: No particular effects or critical hazards are known.

Ingestion: No particular effects or critical hazards are known.

Skin contact: No particular effects or critical hazards are known.

Eye contact: No particular effects or critical hazards are known.

**Symptoms due to the physical, chemical and toxicological properties**

Inhalation: No specific data

Swallowing: No specific data

Skin contact: No specific data

Eye contact: No specific data

Generally: No particular effects or critical hazards are known.

Carcinogenicity : No particular effects or critical hazards are known.

Mutagenicity: No particular effects or critical hazards are known.

Teratogenicity : No particular effects or critical hazards are known.

Impacts on the fertility: No particular effects or critical hazards are known.

## 12. Environmental information

Toxicity: Not available

Persistence and degradability: Not available

Bioaccumulation potential:

Mobility in the ground:
Distribution coefficient soil/water (KOC) mobility: Not available

**Results of the PBT and vPvB assessment**

PBT: Not available

vPvB : Not available

Other harmful substances: No particular effects or critical hazards are known.
Effects

## 13. Disposal instructions

The information in this section contains general advice and guidance. The list of identified uses in Section 1 should be consulted for each application-specific piece of information in the exposure scenario(s).

**Waste prevention methods**

Disposal methods: Like most thermoplastics, this product can be recycled. It can also be landfilled or incinerated in accordance with local regulations.

Hazardous waste: According to the supplier's current knowledge, this product is not classified as hazardous waste within the meaning of the regulations.
EU Directive 91/689/EEC should be considered.

Disposal methods: Waste generation should be avoided or minimized wherever possible. Packaging waste should be recycled.
Incineration or landfill disposal should only be considered in be considered when recycling
is not feasible.

Special precautions: This material and its containers must be stored safely.
Dispose of in this manner. Empty containers or inner containers May contain some product residues. Preventing the Spread of released material into the soil, bodies of water, drains and sewage pipes.

## 14. Transport details

The substance is not subject to the transport regulations for dangerous goods contained in the ADR (road transport),
RID (rail transport), IMDG (sea transport) and ICAO/IATA (air transport) are included.

UN number **:** Not applicable
Proper UN shipping designation **:** Not applicable
Transport hazard class **:** None
Packaging group **:** Not applicable
Environmental hazards: Not applicable

Special precautions for the user **:**
Bulk transport in accordance with Annex II of the MARPOL Convention 73/78 and in accordance with the IBC Code.
Not applicable

## 15 Legal regulations

Regulations concerning safety, health and environmental protection/specific legal regulations for the Substance or mixture, EC Regulation No. 1907/2006 (REACH)

Annex XVII
Restriction on the manufacture, placing on the market and use of certain dangerous substances,
Mixtures and products: None of the components are listed.

Chemical safety assessment: Not available

**Recommended restrictions:**
Do not use for medical applications involving permanent implants in the human body.

## 16 Other Information

End use: Plastic for 3D printing

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All other sections were checked for completeness and accuracy. Following these changes, the revised safety data sheet complies with the requirements of Regulation (EU) 2020/878.

To the best of our knowledge , information and belief as of the date of this publication, the
The information contained herein is correct. This information is intended only as a guideline for safe handling, use, procedure, storage, transport, disposal, and release.
and are not considered a guarantee or quality specification. The information applies only to this specific product and not to substances used in combination with any other substances or processes, unless otherwise stated in the text. While certain risks are described herein, we cannot guarantee that these are the only possible risks.