

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 07.06.2023 Version: 1.0

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

# 1.1. Product identifier

Product form : Substance

Trade name : Prusament PETG by Prusa Polymers

Chemical name : Copolyester

Type of product : Thermoplastic polymers
Synonyms : Prusament PETG, all colours
REACH authorisation exemptions : Exempted from REACH registration

# 1.2. Relevant identified uses of the substance or mixture and uses advised against

### 1.2.1. Relevant identified uses

Industrial/Professional use spec : Consumer uses

Professional uses

Use of the substance/mixture : Filaments for 3D printing

#### 1.2.2. Uses advised against

No additional information available

# 1.3. Details of the supplier of the safety data sheet

Distributor Manufacturer

 Prusa Research a.s.
 Prusa Polymers a.s.

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 Partyzanska 188/7A

 170 00 Praha
 170 00 Prague 7

 Czech Republic
 Czech Republic

 T +420 222 263 718
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info@prusa3d.cz - www.prusa3d.cz info@prusa3d.cz - www.prusa3d.cz

### 1.4. Emergency telephone number

Country	Official advisory body	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA	0344 892 0111	Only for healthcare professionals

# **SECTION 2: Hazards identification**

# 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

No labelling applicable

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#### 2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

# **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

: Product based on copolyester with additives. Comments

Substance type : Polymer

Name	Product identifier		Classification according to Regulation (EC) No. 1272/2008 [CLP]
Copolyester	-	≥ 97	Not classified

### 3.2. Mixtures

Not applicable

# **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

First-aid measures general : Not expected to present a significant hazard under anticipated conditions of normal use. In

case of doubt or persistent symptoms, consult always a physician.

First-aid measures after inhalation : Vapors from heated or molten material can be dangerous, as can dust from grinding the

material. Remove person to fresh air and keep comfortable for breathing. Get medical

advice/attention if you feel unwell.

First-aid measures after skin contact : Cool skin rapidly with cold water after contact with molten product. Get medical

advice/attention.

First-aid measures after eye contact : Rinse eyes with plenty of cool water for at least 10 minutes while pulling eyelides up.

Remove contact lenses, if present and easy to do. Continue rinsing. Consult an

ophtalmologist if irritation persists.

First-aid measures after ingestion : Not expected to present a significant ingestion hazard under anticipated conditions of

normal use. Rinse mouth. Do not induce vomiting. If you feel unwell, seek medical advice.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after skin contact : Risk of thermal burns on contact with molten product.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

# **SECTION 5: Firefighting measures**

# 5.1. Extinguishing media

Suitable extinguishing media : Foam. Water spray. Carbon dioxide. Dry powder. Unsuitable extinguishing media Use of heavy stream of water may spread fire.

# 5.2. Special hazards arising from the substance or mixture

Fire hazard : The inhalation of decomposition combustion products may result in health damage. Use

water spray or fog for cooling exposed containers. Take action to prevent static discharges.

: May form explosive dust-air mixture if small particles are generated during further Explosion hazard

processing, handling, or by other means.

: Carbon oxides (CO, CO<sub>2</sub>). styrene. Other toxic gases. Hazardous decomposition products in case of fire

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## 5.3. Advice for firefighters

Firefighting instructions : During the fire of the product, keep the safe distance, use suitable breathing protection

(isolation device), or self-contained breathing apparatus. Prevent fire fighting water from

entering the environment.

Protection during firefighting : Positive pressure self-contained breathing apparatus (SCBA) and structural fire-fighters

protective clothing.

### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures : No flames, no sparks. Eliminate all sources of ignition. Avoid contact with skin and eyes.

Wear recommended personal protective equipment.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

# 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal.

Avoid dust formation. Dispose in a safe manner in accordance with local/national

regulations.

# 6.4. Reference to other sections

See Section 8 and 13 of this safety data sheet.

# **SECTION 7: Handling and storage**

# 7.1. Precautions for safe handling

Precautions for safe handling : Good ventilation of the workplace required. Do not breathe vapours. Avoid contact with skin

and eyes.

Handling temperature : Users should be protected from the possibility of contact with molten material.

Hygiene measures : Use good personal hygiene practices. Do not eat, drink or smoke when using this product.

Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work.

# 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a dry, cool and well-ventilated place. Protect from moisture. Keep away from food,

drink and animal feedingstuffs. Keep out of the reach of children.

Maximum storage period : 1 year from manufacture. If you do not need filament for a longer period of time, insert it back into the container with the attached silica gel. The product can be hygroscopic.

: 5 − 35 °C

Heat and ignition sources : Keep away from heat and direct sunlight. Keep away from sources of ignition - No smoking.

# 7.3. Specific end use(s)

Material for 3D-printing.

Storage temperature

## **SECTION 8: Exposure controls/personal protection**

# 8.1. Control parameters

# 8.1.1 National occupational exposure and biological limit values

No additional information available

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#### 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

No additional information available

#### 8.1.5. Control banding

No additional information available

# 8.2. Exposure controls

### 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station. Avoid prolonged and repeated contact with skin. Avoid contact with skin and eyes. Do not breathe vapours. Use personal protective equipment according to condition of handling (solid cold material or hot molten material).

#### 8.2.2. Personal protection equipment

### 8.2.2.1. Eye and face protection

#### Eye protection:

Not required for normal conditions of use

### 8.2.2.2. Skin protection

#### Skin and body protection:

Not required for normal conditions of use

#### Hand protection:

Not required for normal conditions of use

### 8.2.2.3. Respiratory protection

### Respiratory protection:

In case of inadequate ventilation wear respiratory protection. Do not work in an unventilated enclosed space, or use a cover for a 3D printer.

### 8.2.2.4. Thermal hazards

No additional information available

#### 8.2.3. Environmental exposure controls

# Environmental exposure controls:

Observe the usual environmental precautions, see section 6.2.

### Other information:

Do not eat, drink or smoke during use. Wash hands and other exposed areas with soap and water before leaving work.

# **SECTION 9: Physical and chemical properties**

# 9.1. Information on basic physical and chemical properties

Physical state : Solid

Colour : According to product specification.

Appearance : Colored plastic wire.

Odour Odourless. Odour threshold : Not available Melting point : > 220 °C Freezing point Not available Boiling point Not available Flammability : Not available Explosive properties : Not explosive. It does not have oxidising properties : Non oxidizing. : Not applicable Explosion limits Lower explosion limit : Not applicable

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Upper explosion limit : Not applicable : Not applicable Flash point Auto-ignition temperature : Not applicable Decomposition temperature Not available Not available рН Not available pH solution Viscosity, kinematic : Not applicable Insoluble in water. Solubility Partition coefficient n-octanol/water (Log Kow) : Not available Vapour pressure : Not available Vapour pressure at 50°C : Not available Density : > 1 g/cm<sup>3</sup> : Not available Relative density Relative vapour density at 20°C : Not applicable Not available Particle size Particle size distribution : Not available Particle shape : Not available Particle aspect ratio : Not available Particle aggregation state : Not available Particle agglomeration state : Not available Particle specific surface area : Not available

#### 9.2. Other information

Particle dustiness

#### 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

No additional information available

# **SECTION 10: Stability and reactivity**

# 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

# 10.2. Chemical stability

The product is stable at normal handling and storage conditions.

# 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

# 10.4. Conditions to avoid

Avoid keeping resin molten for excessive periods of time at elevated temperatures. Prolonged exposure will cause polymer degradation.

: Not available

# 10.5. Incompatible materials

Strong oxidizing agents.

### 10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide. Other toxic gases.

### **SECTION 11: Toxicological information**

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Based on available data, the classification criteria are not met
Acute toxicity (dermal) : Based on available data, the classification criteria are not met
Acute toxicity (inhalation) : Based on available data, the classification criteria are not met
Skin corrosion/irritation : Based on available data, the classification criteria are not met

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Serious eye damage/irritation : Based on available data, the classification criteria are not met. Respiratory or skin sensitisation : Based on available data, the classification criteria are not met. Germ cell mutagenicity : Based on available data, the classification criteria are not met. Carcinogenicity : Based on available data, the classification criteria are not met. Reproductive toxicity Based on available data, the classification criteria are not met. STOT-single exposure Based on available data, the classification criteria are not met. STOT-repeated exposure : Based on available data, the classification criteria are not met. Aspiration hazard : Based on available data, the classification criteria are not met.

## 11.2. Information on other hazards

#### 11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties

: The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

#### 11.2.2. Other information

No additional information available

# **SECTION 12: Ecological information**

### 12.1. Toxicity

Hazardous to the aquatic environment, short-term

(acute)

Hazardous to the aquatic environment, long-term (chronic)

: Based on available data, the classification criteria are not met

: Based on available data, the classification criteria are not met

## 12.2. Persistence and degradability

Prusament PETG by Prusa Polymers		
Persistence and degradability	Not readily biodegradable.	

# 12.3. Bioaccumulative potential

Prusament PETG by Prusa Polymers	
Bioaccumulative potential	No bioaccumulation.

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

# **Prusament PETG by Prusa Polymers**

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

# 12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties

: The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

### 12.7. Other adverse effects

No additional information available

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# **SECTION 13: Disposal considerations**

# 13.1. Waste treatment methods

Regional legislation (waste) : Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008

on waste and repealing certain Directives.

Waste treatment methods : Recycling is preferred to disposal or incineration. Do not remove as household garbage.

Dispose in a safe manner in accordance with local/national regulations.

Product/Packaging disposal recommendations

Additional information

Ecology - waste materials

Dispose in a safe manner in accordance with local/national regulations.Sort out as plastic waste.

: Avoid release to the environment.

# **SECTION 14: Transport information**

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID num	ber			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping n	ame			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard clas	ss(es)			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable Not applicable Not appli		Not applicable	Not applicable	Not applicable
14.5. Environmental hazard	ls			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information	n available			

# 14.6. Special precautions for user

### **Overland transport**

Not applicable

## Transport by sea

Not applicable

# Air transport

Not applicable

# Inland waterway transport

Not applicable

#### Rail transport

Not applicable

# 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

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# SECTION 15: Regulatory information

# 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU-Regulations

#### **REACH Annex XVII (Restriction List)**

Not listed on REACH Annex XVII

### **REACH Annex XIV (Authorisation List)**

Not listed on REACH Annex XIV (Authorisation List)

#### **REACH Candidate List (SVHC)**

Not listed on the REACH Candidate List

## PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

#### **POP Regulation (Persistent Organic Pollutants)**

Not listed on the POP list (Regulation EU 2019/1021)

#### Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

#### Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

#### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

### 15.1.2. National regulations

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (CLP)

Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

# **SECTION 16: Other information**

Abbreviations and acronyms:		
CAS-No.	Chemical Abstract Service number	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008	
ED	Endocrine disrupting properties	
EN	European Standard	
IATA	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
OECD	Organisation for Economic Co-operation and Development	
PBT	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	

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Training advice

Other information

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Abbreviations and acronyms:	
vPvB	Very Persistent and Very Bioaccumulative

Data sources : ECHA Guidance on the compilation of safety data sheets

ECHA C&L Inventory database. Manufacturer Information.

: Normal use of this product shall imply use in accordance with the instructions on the

packaging.

 This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. RoHS –

Directive 2011/65/EU

Prusa Polymers doesn't have any information about the content of hazardous substances in Prusament PETG, these substances aren't used during the production of filament. No measurements and analyses have been done, but based on the information given by material suppliers, it is not expected any amount of hazardous substances in levels exceeding the concentration described in Directive 2011/65/EU.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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