

P-filament

Version 1.0 issued on 06/02/2019

P-filament

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product

Trade name	P-filament
Synonyms	PPprint PP-Filament
Chemical characterization	Polypropylene copolymer / blend

Relevant uses of the substance or mixture

Manufacture of plastic articles extrusion-based 3D printing

Uses advised against

FDA Class III and European class III medical devices;
Health Canada class IV medical devices;
Applications involving permanent implantation into the body;
Life-sustaining medical applications

Supplier

Firma: PPprint GmbH
Gottlieb-Keim-Straße 60, 95448 Bayreuth
Deutschland
E-Mail: office@ppprint.de

Emergency number

Poison control center:
Charité, Berlin
DE: +49 30 19240
24 hours all days

2. Hazards identification

Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

Labeling elements (Regulation (EG) Nr. 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB).
Risk of burns when handling heated or molten material.

3. Composition/information on ingredients

Main Ingredient: Polypropylene based copolymer / blend.
The product may contain various types of additives, e.g. Stabilizers, antioxidants, lubricants and antiblocking agents.

Material Safety Data Sheet

(according regulation (EG) Nr. 1907/2006)

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4. First aid measures

Description of first-aid measures

If inhaled	Remove person to fresh air. If signs/symptoms continue, get medical attention. Obtain medical attention.
In case of skin contact	If molten material contacts the skin, immediately flush with large amounts of water to cool the affected tissue and polymer. Do not attempt to peel polymer from skin as this will remove the skin. Obtain immediate emergency medical attention if burn is deep or extensive.
In case of eye contact	Flush eyes thoroughly with water for several minutes and seek medical attention if discomfort persists. Beyond flushing, DO NOT attempt to remove the material adherent to the eye(s). Immediately seek medical attention.
If swallowed	Not probably: Adverse health effects due to ingestion are not anticipated. If you feel unwell, seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms	Inhalation of process fumes and vapors may cause soreness in the nose and throat and coughing.
Hazards	Molten polymer may cause thermal burns.

Indication of any immediate medical attention and special treatment needed

Treatment	Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.
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5. Fire-fighting measures

Suitable extinguishing media

SMALL FIRE:
Use CO₂, water spray or dry chemical.

LARGE FIRES:
Use water spray hose nozzles from a safe location.

Unsuitable extinguishing media

None known.

Special hazards arising from the substance or mixture

Keep away from heat and sources of ignition. In case of fire hazardous decomposition products may be produced such as: Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

Special protective equipment for fire-fighters

Wear approved positive pressure self-contained breathing apparatus and firefighter protective clothing.

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6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Equip responders with proper protection.

Environmental precautions

Do not flush into surface water or sanitary sewer system.

Methods and materials for containment and cleaning up

Allow molten material to cool. Dispose of waste and residues in accordance with local regulations.

7. Handling and storage

Advice on safe handling	Avoid contact with molten material.
Fire-fighting class	Polymer will burn but does not easily ignite.
Storage	Store the product in a cool, dry place at temperatures between -10 and + 35 °C and at a relative humidity of less than 50%.
Specific end uses	Filament for extrusion-based 3D printing

8. Exposure controls/personal protection

Do not eat, drink or smoke during use. Wash hands before breaks and at the end of work. Adequate Personal Safety Equipment (PPE) has to be used. The PPE must comply with the requirements of Regulation (EU) 2016/425.

Ensure adequate ventilation. Local exhaust device may be necessary.

Environmental exposure controls

See section 6.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance:	filament
Color:	natural color
Odor:	odorless
Flash point:	not determined
Flammability (solid, gas):	polymer will burn but does not easily ignite
Autoignition temperature:	> 300 °C
Decomposition temperature:	not determined
Melting range:	50 - 170 °C
Boiling range:	not applicable
Vapor pressure:	not applicable
Oxidizing properties:	not considered an oxidizing agent
Density:	< 1 g/cm ³
Water solubility:	insoluble

Other information

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No additional information available.

10. Stability and reactivity

Reactivity

Product is stable if the instructions for storage and handling are observed

Chemical stability

Stable under normal conditions

Possibility of hazardous reactions

No dangerous reactions when stored and used as intended

Conditions to avoid

Avoid contact with strong oxidizers, excessive heat, sparks or open flame

Incompatible materials

Material may be softened by some hydrocarbons, avoid contact with strong oxidizers

Hazardous decomposition products

Deomposition under normal conditions is not expected

Thermal decomposition

Carbon monoxide, olefinic and paraffinic compounds, trace amounts of organic acids, ketones, aldehydes and alcohols may be formed

11. Toxicological information

The product is not considered hazardous to human health

12. Ecological information

The product is not classified as harmful to the environment. Not readily biodegradable. Does not accumulate in organisms.

Avoid release to the environment.

13. Disposal considerations

Uncontaminated waste can be reprocessed. The product may be packaged, labeled, transported, disposed of or regenerated in accordance with applicable laws and regulations and appropriate technical procedures.

Recycle if possible.

14. Transport information

No special safety precautions required (ADR / RID, IMDG or IATA).

Keep away from strong oxidants and sources of ignition.

15. Regulatory information

No applicable laws known.

Water hazard class (WGK): not hazardous to water

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16. Other information

A safety data sheet according to Article 31 of Regulation (EC) No 1907/2006 is not required for this product.

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End of material safety data sheet