

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

1.1. Product identifier

Product Name **R-PEEK**

Pure substance/mixture Substance

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

Application Additive manufacturing

Uses advised against Not identified.

1.3. Details of the supplier of the safety data sheet

Manufacturer

3D4Makers
 Waarderweg 56
 2031BP Haarlem
 Netherlands
 Tel +31 (0) 23 820 0584
<https://www.3D4Makers.com/>

E-mail address info@3d4makers.com

1.4. Emergency telephone number

Europe
 Emergency Telephone - +31 (0) 23 820 0584 (08.00-17.00 CET)

The Netherlands See above.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]
 Preparation is not classified as hazardous in the sense of directive 1999/45/EC and 2006/121/EC.

Product will burn in fire.

SECTION 3: Composition/information on ingredients

3.1 Substances

HAZARDOUS INGREDIENT(S)	EC No	CAS No	REACH Registration Number	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
None	-	-	-	-	-

Preparation consisting of:
 Polyetheretherketone (CAS No. 31694-16-3)

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move to fresh air in case of accidental inhalation of vapours. If irritation persists get medical advice/attention.
Skin contact	In contact with molten product immediately flush with cold water for at least 10 minutes. Do not pull solidified product off the skin. In case of burn injury immediately get medical attention.
Eye contact	Rinse thoroughly with plenty of water, also under the eyelids.
Ingestion	If a large quantity has been ingested or if you feel unwell, get medical advice/attention.

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

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

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

As appropriate for surrounding fire. Extinguish with carbon dioxide, dry chemical, foam or waterspray.

Unsuitable extinguishing media

Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

Carbon monoxide (CO), Carbon dioxide (CO₂).

5.3. Advice for firefighters

Protective respirator with independent air supply. Full protection, if necessary.

5.4. Special exposure hazards arising from the substance or preparation itself, combustion product, resulting gases.

In case of fire the following can develop: Oxides of carbon. Dust is ignitable but will not sustain combustion. A high temperature source of ignition is required. Insensitive to sparks. The minimum spark energy required for ignition of a dust cloud is greater than 5000 mJ. It will not train fire, e.g. along beams etc.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required. Avoid contact with eyes and skin. Remove all sources of ignition.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological information.

6.3. Methods and material for containment and cleaning up

Methods for containment

Prevent product from entering drains.

Methods for cleaning up

Collect in closed and suitable containers for disposal.

6.4. Reference to other sections

See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required.

General Hygiene Considerations

Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Ensure good ventilation at the work station.

7.2. Conditions for safe storage, including any incompatibilities

Keep tightly closed in a dry and cool place. Hygroscopic.

7.3. Specific end use(s)

This information is supplied in the present Safety Data Sheet.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Exposure Limits**

Keep personal exposure levels below Derived No Effect Level (DNEL) and national exposure limit values (if existing).

Derived No Effect Level (DNEL) - worker

Not determined

Derived No Effect Level (DNEL) - Consumer

Not determined

Predicted No Effect Concentration (PNEC)

Not determined

8.2. Exposure controls**Appropriate engineering controls**

Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles).

Hand Protection

Protective gloves not really required. However, we recommend using protective gloves made of rubber. PVC gloves, Butyl rubber, Chloroprene rubber, CR.

Skin and body protection

Long sleeved clothing.

Respiratory protection

If above exposure limits are likely to be exceeded, breathing mask with fine dust filter (EN 143)

Environmental exposure controls

No information available.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties****Appearance**

Filament

Grey/Brown

Odour

Odourless

Odour threshold

Not applicable

Property**Value****Remarks • Method**

pH

No information available

Melting point / freezing point	343 °C	Glass transition
Boiling point / boiling range		Not determined
Flash point		
Evaporation rate		No information available
Flammability (solid, gas)		Not determined
Explosive limits		
Upper explosive limits		Not applicable
Lower explosive limits		Not applicable
Vapour pressure		Not determined
Vapour density		Not applicable
Relative density		No information available
Water solubility		Insoluble in water
Solubility(ies)		No information available
Partition coefficient		No information available
Autoignition temperature	595 °C	
Decomposition temperature		No data available
Kinematic viscosity		No information available
Dynamic viscosity		No information available
Explosive properties	Not explosive.	Examination of the structure indicates that there are no groups associated with explosive properties.
Oxidising properties	Not oxidising.	Due to structural composition of the substance it is not considered to be oxidizing.
Density	1.3 g/cm ³	@ 20 °C
Bulk density		No information available

9.2. Other information

No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

There exists no specific test data for this product. For further information, see the subsequent subsections of this chapter.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

None under normal processing.

10.4. Conditions to avoid

See Section: 7. Stable when handled and stored correctly. Electrostatic charge. Open flame, ignition sources. Decomposes at temperatures above (°C): 450.

10.5. Incompatible materials

See Section: 7. Concentrated Sulphuric acid.

10.6. Hazardous decomposition products

See Section: 5.4

SECTION 11: Toxicological information

The following information is based on a consideration of the properties of the main components of this mixture.

11.1. Ingestion

Predicted to be low toxicity under normal conditions of handling and use.

11.2. Inhalation

Mechanical irritation of the respiratory tract.

11.3. Skin contact

Repeated and/or prolonged skin contact may cause irritation. In the event of contact with molten product: Thermal Burns (molten polymer will adhere to skin and cause severe burns).

11.4. Eye Contact

No data. Dust may have irritant effect on eyes. Permanent damage is unlikely.

11.5. Long Term Exposure

Chronic effects are unlikely.

SECTION 12: Ecological information**12.1. Environmental Fate and Distribution**

Insoluble in water. The product has low mobility in soil.

12.2. Persistence and degradability

The product is not biodegradable.

12.3. Toxicity

Low toxicity to aquatic organisms.

12.4. Effect on Effluent Treatment

Unlikely to affect biological treatment processes.

12.5. Water hazard class:

Not classified.

12.6. Other adverse effects

SECTION 13: Disposal considerations

13.1 Regulatory information

Do not allow to enter drains, sewers or watercourses. Disposal should be in accordance with local, state or national legislation.

13.2 E.C disposal code no:

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company. The waste codes are recommendations based on the scheduled use of this product. For alternative uses and applications, other waste codes may be allocated under certain circumstances. 07 02 13- waste plastic. 07 02 99- waste not otherwise specified.

13.3 Recommended:

Containers must be decontaminated in accordance with all applicable regulations.

SECTION 14: Transport information

ADR Road transport

14.1 UN number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing Group	Not regulated
14.5 Environmental hazard	Not applicable
14.6 Special precautions for user	None

RID Rail transport

14.1 UN number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing Group	Not regulated
14.5 Environmental hazard	Not applicable
14.6 Special precautions for user	None

IMDG Sea transport

14.1 UN number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing Group	Not regulated
14.5 Marine pollutant	Not applicable
14.6 Special precautions for user	None
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No information available

IATA Air transport

14.1 UN number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing Group	Not regulated
14.5 Environmental hazard	Not applicable
14.6 Special precautions for user	None

SECTION 15: Regulatory information

Classification according to Dangerous Product Regulations incl. EC Directives 67/548/EEC, 1999/45/EC and 2006/121/EC.

14.1 UN number	Not classified as dangerous for supply/use.
14.2 UN proper shipping name	Not applicable.
14.3 Transport hazard class(es)	Not applicable.
14.4 Packing Group	Not applicable.
14.5 Environmental hazard	VOC 1999/13/EC
14.6 Special precautions for user	None

INTERNATIONAL INVENTORIES

EINECS (Europe) EINECS: Included.

SECTION 16: Other information**Key or legend to abbreviations and acronyms used in the safety data sheet**

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Revision Note	No information available

This safety data sheet complies with the requirements of: This Safety Data Sheet was prepared in accordance with Directive 2001/58/EC.

Disclaimer

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End of Safety Data Sheet