

Safety Data Sheet

acc. to OSHA HCS

Printing date 03/05/2013

Reviewed on 03/05/2013

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

- **Product identifier**

- **Trade name:** *PPSF Model*

- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.

- **Application of the substance / the preparation** *Filament for Stratasys® Inc. FDM™ modeler*

- **Details of the supplier of the safety data sheet**

- **Manufacturer/Supplier:**

Stratasys, Inc.
7665 Commerce Way
Eden Prairie, MN 55344
USA

Tel +1 952 937 3000
Fax +1 952 937 0070

For information in Europe contact:

C.S.B. GmbH
Düsseldorfer Straße 113
D-47809 Krefeld
Germany

Tel.: +49-2151-6520860
Fax: +49-2151-6520869
E-Mail: info@csb-online.de

- **Information department:** *Product safety department.*

- **Emergency telephone number:** *see above*

2 Hazards identification

- **Classification of the substance or mixture**

The substance is not classified according to the Globally Harmonized System (GHS).

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** *Void*

- **Label elements**

- **GHS label elements** *Void*

- **Hazard pictograms** *Void*

- **Signal word** *Void*

- **Hazard statements** *Void*

- **Additional information:** *Void*

- **Classification system**

- **NFPA ratings (scale 0-4)**



- **HMIS**

HEALTH	0	Health = 0
FIRE	1	Fire = 1
REACTIVITY	0	Reactivity = 0

- **Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** *Not applicable.*

- **vPvB:** *Not applicable.*

3 Composition/information on ingredients

- **Chemical characterization:** *Substances*

- **CAS No. Description:**

Polyphenylsulfone thermoplastic

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Trade name: PPSF Model

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· **Identification number(s):** void, polymer

4 First aid measures

· **Description of first aid measures**· **General information** Remove contaminated clothing.· **After inhalation**

Supply fresh air; consult doctor in case of complaints.

After inhalation of decomposition products, remove the affected person to a source of fresh air and keep calm. Provide medical aid.

· **After skin contact**

Immediately wash with water and soap and rinse thoroughly.

After contact with the molten product, cool rapidly with cold water.

Do not pull solidified product away from the skin.

Call a doctor immediately.

· **After eye contact**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing**

Rinse out mouth and then drink plenty of water.

If symptoms persist consult doctor.

· **Most important symptoms and effects, both acute and delayed** No further relevant information available.· **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

5 Firefighting measures

· **Extinguishing media**· **Suitable extinguishing agents**CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.· **For safety reasons unsuitable extinguishing agents** Water with full jet.· **Special hazards arising from the substance or mixture**Sulphur oxides (SO_x)

Carbon monoxide and carbon dioxide

Hydrocarbons

· **Advice for firefighters**· **Protective equipment:** Use suitable respiratory protective device.· **Additional information**

Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**

Avoid formation of dust.

Do not breathe dust.

Avoid contact with eyes.

· **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.· **Methods and material for containment and cleaning up:**

Pick up mechanically.

Dispose of the collected material according to regulations.

· **Reference to other sections**

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

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7 Handling and storage**· Precautions for safe handling***Ensure good ventilation/exhaustion at the workplace.**Prevent formation of dust.**If dust/smoke is developed, avoid breathing dust/smoke.**Avoid contact with eyes.**Avoid contact with hot product.**Make sure that all applicable workplace limits are observed.***· Information about protection against explosions and fires:** *No special measures required.***· Conditions for safe storage, including any incompatibilities****· Storage****· Requirements to be met by storerooms and receptacles:***Observe all local and national regulations for storage of water polluting products.***· Information about storage in one common storage facility:** *Not required.***· Further information about storage conditions:***Store receptacle in a well ventilated area.**Store in cool, dry conditions in well sealed receptacles.**Storage temperature < 70 °C***· Specific end use(s)** *No further relevant information available.***8 Exposure controls/personal protection****· Additional information about design of technical systems:** *No further data; see item 7.***· Control parameters****· Components with limit values that require monitoring at the workplace:***Observe all workplace limits for dust:**TLV inhalable dust: 15 mg/m³ OSHA**TLV respirable dust: 5 mg/m³ OSHA***· Additional information:** *The lists that were valid during the creation were used as basis.***· Exposure controls****· Personal protective equipment****· General protective and hygienic measures***Do not inhale dust / smoke / mist.**Avoid contact with the eyes.**Wash hands before breaks and at the end of work.***· Breathing equipment:***If all workplace limits are observed and good ventilation is ensured, no special precautions necessary.**Use breathing protection in case of dust formation.**Dust proof mask - particle filter mask filter***· Protection of hands:***No chemical-protective gloves required.**Use heat resistant gloves when handling hot/molten product.***· Eye protection:** *Safety glasses***· Body protection:** *Wear heat-resistant protective clothing when handling hot/molten product.***9 Physical and chemical properties****· Information on basic physical and chemical properties****· General Information****· Appearance:****Form:** *solid***Color:** *Different according to coloring*

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· Odor:	odorless
· Odor threshold:	no data available
· pH-value:	Not applicable
· Change in condition	
Melting point/Melting range:	Not determined
Boiling point/Boiling range:	Not applicable
· Flash point:	Not applicable
· Flammability (solid, gaseous)	combustible
· Ignition temperature:	502 °C (936 °F)
· Decomposition temperature:	> 430 °C (> 806 °F)
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined
Upper:	Not determined
· Oxidizing properties	Not applicable
· Vapor pressure:	Not applicable
· Density at 20 °C (68 °F):	1.29 g/cm ³ (10.765 lbs/gal)
· Relative density at 20 °C (68 °F)	1.29 (H ₂ O = 1)
· Vapour density (AIR = 1)	Not applicable
· Evaporation rate	Not applicable
· Solubility in / Miscibility with Water:	Insoluble
· Partition coefficient (n-octanol/water):	Not determined
· Viscosity:	
dynamic:	Not applicable
kinematic:	Not applicable
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** see 10.3
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
Temperature over 430 °C
- **Possibility of hazardous reactions** No dangerous reactions known
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:**
Strong oxidizing agents
Strong acids
Aromatic solvents
- **Hazardous decomposition products:**
Carbon monoxide and carbon dioxide
Hydrocarbons
Sulfur oxides (SO_x)

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11 Toxicological information

 · **Information on toxicological effects**

 · **Acute toxicity:**

 · **LD/LC50 values that are relevant for classification:** no data available

 · **Primary irritant effect:**

 · **on the skin:** Dust particles may mechanically irritate the skin.

 · **on the eye:** Dust particles may mechanically irritate the eye.

 · **Sensitization:** No sensitizing effects known.

 · **Additional toxicological information:**

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

 · **Carcinogenic categories**

 · **IARC (International Agency for Research on Cancer)**

Substance is not listed.

 · **NTP (National Toxicology Program)**

Substance is not listed.

12 Ecological information

 · **Toxicity**

 · **Aquatic toxicity:** No further relevant information available.

 · **Persistence and degradability** No further relevant information available.

 · **Bioaccumulative potential** No further relevant information available.

 · **Mobility in soil** No further relevant information available.

 · **Additional ecological information:**

 · **General notes:** Water hazard class 1 (Self-assessment) (German regulation): slightly hazardous for water.

 · **Results of PBT and vPvB assessment**

 · **PBT:** Not applicable.

 · **vPvB:** Not applicable.

 · **Other adverse effects** No further relevant information available.

13 Disposal considerations

 · **Waste treatment methods**

 · **Recommendation** Disposal must be made according to local/official regulations.

 · **Uncleaned packagings:**

 · **Recommendation:** Disposal must be made according to local/official regulations.

14 Transport information

 · **UN-Number**

 · **DOT, ADR, IMDG, IATA** Void

 · **UN proper shipping name**

 · **DOT, IMDG, IATA** Void

 · **ADR** Void

 · **Transport hazard class(es)**

 · **DOT, ADR, IMDG, IATA**

 · **Class** Void

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· Packing group	
· DOT, ADR, IMDG, IATA	Void
· Environmental hazards:	Not applicable.
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	-

15 Regulatory information

 · **Safety, health and environmental regulations/legislation specific for the substance or mixture**

 · **SARA Section 355 (extremely hazardous substances)**

Substance is not listed.

 · **TSCA (Toxic Substances Control Act)**

Substance is not listed.

 · **Carcinogenicity categories**

 · **MAK (German Maximum Workplace Concentration)**

Substance is not listed.

 · **National regulations**

 · **Disturbance regulations:** Directive 96/82/EC does not apply.

 · **Water hazard class:**

Water hazard class 1 (Self-assessment) (German regulation): slightly hazardous for water.

 · **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

 · **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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