

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 05.03.2013

Revision: 05.03.2013

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

- **Date of compilation:** 30.01.2005
- **1.1 Product identifier**
- **Trade name:** PPSF Model
- **1.2 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
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer / Supplier:**
Stratasys, Inc. Tel +1 952 937 3000
7665 Commerce Way Fax +1 952 937 0070
Eden Prairie, MN 55344
USA

- **For information in Europe contact:**
- **C.S.B. GmbH** Tel.: +49-2151-6520860
Düsseldorfer Straße 113 Fax: +49-2151-6520869
D-47809 Krefeld E-Mail: info@csb-online.de
Germany
- **E-mail address of the competent person responsible for the Safety Data Sheet:** sdb@csb-online.de
- **Informing department:** Product safety department
- **1.4 Emergency telephone number:** As above or next toxicological information centre.

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
The substance is not classified according to the CLP regulation.
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** Void
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Additional information:** Void
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.1 Chemical characterization: Substances**
- **CAS No. Designation:**
Polyphenylsulfone themoplastic
- **Identification number(s):** void, polymer

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** Remove contaminated clothing.

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- **After inhalation:**
Supply fresh air; consult doctor in case of symptoms.
After inhalation of decomposition products, remove the affected person to a source of fresh air and keep calm. Provide medical aid.
- **After skin contact:**
Instantly 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 doctor.
- **After swallowing:**
Rinse out mouth and then drink plenty of water.
In case of persistent symptoms consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents**
Carbon dioxide (CO₂), extinguishing powder or water spray/fog. Fight larger fires with water spray/fog or alcohol-resistant foam.
- **For safety reasons unsuitable extinguishing agents** Water with a full water jet.
- **5.2 Special hazards arising from the substance or mixture**
Sulphur oxides (SO_x)
Carbon monoxide (CO) and Carbon dioxide (CO₂)
Hydrocarbons
- **5.3 Advice for firefighters**
- **Protective equipment:** Put on breathing apparatus.
- **Additional information** Collect contaminated fire fighting water separately. It must not enter drains.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Avoid causing dust.
Do not breathe dust.
Avoid contact with eyes.
- **6.2 Environmental precautions:** Do not allow to enter drainage system, surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Collect mechanically.
Dispose of the material collected according to regulations.
- **6.4 Reference to other sections**
See Section 8 for information on personal protection equipment.

SECTION 7: Handling and storage

- **7.1 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.

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- **Information about protection against explosions and fires:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:**
 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 container in a well ventilated position.
 Store in cool, dry conditions in well sealed containers.
 Storage temperature: < 70 °C
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **8.1 Control parameters**
- **Components with critical values that require monitoring at the workplace:**
 Observe all workplace limits for dust.
- **Additional information:** The lists that were valid during the compilation were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**
 Do not inhale dust / smoke / mist.
 Avoid contact with the eyes.
 Wash hands during breaks and at the end of the 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
- **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.

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

Form:	solid
Colour:	different according to colour
- **Smell:** odourless
- **Odour 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
- **Inflammability (solid, gaseous)** combustible

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· Ignition temperature:	502 °C
· Decomposition temperature:	> 430 °C
· Self-inflammability:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive.
· Critical values for explosion:	
Lower:	not determined
Upper:	not determined
· Oxidizing properties	not applicable
· Vapor pressure:	not applicable
· Density at 20 °C:	1.29 g/cm ³
· Relative density at 20 °C	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
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** see 10.3
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
Temperature over 430 °C
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:**
Strong oxidizing agents
Strong acids
Aromatic solvents
- **10.6 Hazardous decomposition products:**
Carbon monoxide (CO) and Carbon dioxide (CO₂)
Hydrocarbons
Sulphur oxides (SO_x)

SECTION 11: Toxicological information

- **11.1 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 effect known.

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- **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.
- **Repeated dose toxicity** no data available
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
According to present knowledge no CMR-effects known.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** *No further relevant information available.*
- **12.2 Persistence and degradability** *No further relevant information available.*
- **12.3 Bioaccumulative potential** *No further relevant information available.*
- **12.4 Mobility in soil** *No further relevant information available.*
- **Additional ecological information:**
- **General notes:** *Water hazard class 1 (Self-assessment): slightly hazardous for water*
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** *Not applicable.*
- **vPvB:** *Not applicable.*
- **12.6 Other adverse effects** *No further relevant information available.*

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** *Disposal must be made according to official regulations.*
- **Waste disposal key number:** *According to local/national regulations.*
- **European waste catalogue:**
Waste disposal key numbers from EWC have to be assigned depending on origin and processing.
- **Uncleaned packagings:**
- **Recommendation:** *Disposal must be made according to official regulations.*

SECTION 14: Transport information

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------|
| · 14.1 UN-Number
· ADR, IMDG, IATA | <i>Void</i> |
| · 14.2 UN proper shipping name
· ADR, IMDG, IATA | <i>Void</i> |
| · 14.3 Transport hazard class(es)
· ADR, IMDG, IATA
· Class | <i>Void</i> |
| · 14.4 Packing group
· ADR, IMDG, IATA | <i>Void</i> |
| · 14.5 Environmental hazards: | <i>Not applicable.</i> |
| · 14.6 Special precautions for user | <i>Not applicable.</i> |
| · 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | <i>Not applicable.</i> |
| · Transport/Additional information: | <i>Not dangerous according to the above specifications.</i> |

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· **UN "Model Regulation":**

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SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations**
- **Decree to be applied in case of technical fault:** Directive 96/82/EC does not apply.
- **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing MSDS:**

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Düsseldorfer Str. 113
47809 Krefeld / Germany

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· **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
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

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