

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

Printing date 07.01.2013

Revision: 07.01.2013

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

- **Date of issue:** 15.05.2007
- **1.1 Product identifier**
- **Trade name:** P430 ABS Model / M30 ABS Model
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **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

- **In Europe:**

C.S.B. GmbH Tel.: +49-2151-6520860
Parkstraße 29 Fax: +49-2151-6520869
D-47829 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 product is not classified according to the CLP regulation.
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** Void
- **Information concerning particular hazards for human and environment:**
Heightened danger of slipping when the product is spilled on the floor.
- **Classification system:**
The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterization: Mixtures**
- **Description:** Thermoplastic polymer
- **Dangerous components:** Void

- **Other components:**

9010-94-0	Butadiene-styrene-acrylonitrile-methyl methacrylate copolymer	70-75%
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9003-54-7 Styrene/acrylonitrile copolymer (SAN)

25-30%

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** Remove contaminated clothing.
- **After inhalation:**
Supply fresh air; consult doctor in case of symptoms.
If dust or other particles are generated during processing, it is necessary to provide adequate ventilation and/or respiration protection. If dust/particles have been inhaled call physician.
- **After skin contact:**
Wash with soap and water.
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**
Water spray jet
Foam
Alcohol-resistant foam
- **For safety reasons unsuitable extinguishing agents**
Carbon dioxide
Extinguishing powder.
Lack of cooling capacity may permit re-ignition.
- **5.2 Special hazards arising from the substance or mixture**
Can be released in case of fire:
Smoke
Carbon monoxide (CO) and Carbon dioxide (CO₂)
Hydrocarbons
Hydrogen cyanide (HCN)
Under certain fire conditions, traces of other toxic gases cannot be excluded.
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained breathing apparatus.
- **Additional information**
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective clothing.
Avoid causing dust.
Do not breathe dust.
Avoid contact with eyes.

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- Do not breathe vapours.
- Particular danger of slipping on leaked/spilled product.
- **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.
 - Allow to solidify. 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 long or repeated skin contact.
 - Avoid contact with hot product.
 - Make sure that all applicable workplace limits are observed.
- **Information about protection against explosions and fires:**
 - Dust can combine with air to form an explosive mixture.
 - Keep ignition sources away - Do not smoke.
 - Protect against electrostatic charges.
- **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 in cool, dry conditions in well sealed containers.
- **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.
 - Avoid close or long term contact with the skin.
 - Avoid skin contact with the liquefied material.
 - 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.
- **Protection of hands:**
 - No chemical-protective gloves required.
 - Use heat resistant gloves when handling hot/molten product.
- **Eye protection:** Safety glasses

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- **Body protection:**
Protective work clothing
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:	milky white
Smell:	nearly odourless
Odour threshold:	no data available

· **pH-value:** not applicable

· Change in condition

Melting point/Melting range:	not applicable
Boiling point/Boiling range:	not applicable

· **Flash point:** not applicable

· **Self-inflammability:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive.
Risk of dust explosion if enriched with fine dust in presence of air.

· Critical values for explosion:

Lower:	not determined
Upper:	not determined

· **Oxidizing properties** not applicable

· **Vapor pressure:** not determined

· **Density at 20°C:** > 1 g/cm³

· Solubility in / Miscibility with

Water: insoluble

· **Segregation coefficient (n-octanol/water):** not applicable

· Viscosity:

dynamic:	not applicable
kinematic:	not applicable

· **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

· 10.1 Reactivity

· 10.2 Chemical stability

· Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

Avoid impact, friction, heat, sparks, electrostatic charges.

· **10.3 Possibility of hazardous reactions** Toxic fumes may be released if heated above the decomposition point

· **10.4 Conditions to avoid** No further relevant information available.

· **10.5 Incompatible materials:** No further relevant information available.

· 10.6 Hazardous decomposition products:

Carbon monoxide (CO) and Carbon dioxide (CO₂)

Hydrogen cyanide (HCN)

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Hydrocarbons
Possible in traces.
Styrene
Acrylonitril
Phenol
Acetophenone
Acrylmonomers, Acrylcompounds

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

Oral	LD50	> 5000 mg/kg (rat)
Dermal	LD50	> 2000 mg/kg (rabbit)

- **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.
- **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.

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**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Disposal must be made according to official regulations.
- **Waste disposal key number:** According to local/national regulations.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

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SECTION 14: Transport information

· 14.1 UN-Number · ADR, ADN, IMDG, IATA	Void
· 14.2 UN proper shipping name · ADR, ADN, IMDG, IATA	Void
· 14.3 Transport hazard class(es) · ADR, ADN, IMDG, IATA · Class	Void
· 14.4 Packing group · ADR, IMDG, IATA	Void
· 14.6 Special precautions for user	Not applicable.
· 14.7 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":	-

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
 - **Labelling according to Regulation (EC) No 1272/2008** Void
 - **Hazard pictograms** Void
 - **Signal word** Void
 - **Hazard statements** Void
 - **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
 - **Other regulations, limitations and prohibitive regulations**
- The monomer compounds of this product are listed in:
- EINECS (Europe)
 - Toxic Substance Control Act TSCA (USA)
 - Canadian Domestic Substance List DSL (Canada)
 - Existing and New Chemical Substance List ENCS (Japan)
 - Australian Inventory of Chemical Substances AICS (Australia)
 - Korean Existing Chemical Inventory KECI
- **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:**

C.S.B. GmbH Phone: +49 - 2151 - 652086-0
Parkstraße 29 Fax: +49 - 2151 - 652086-9
D-47829 Krefeld
Germany

· **Abbreviations and acronyms:**

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

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IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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