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

- Product identifier
- Trade name: P430 ABS Model / M30 ABS Model
- 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

In Europe:
- C.S.B. GmbH
  Parkstraße 29
  D-47829 Krefeld
  Germany
- Information department: Product safety department.
- Emergency telephone number: see above

2 Composition/information on ingredients

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

Other components:

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>9010-94-0</td>
<td>Butadiene-styrene-acrylonitrile-methyl methacrylate copolymer</td>
<td>70-75%</td>
</tr>
<tr>
<td>9003-54-7</td>
<td>Styrene/acrylonitrile copolymer (SAN)</td>
<td>25-30%</td>
</tr>
</tbody>
</table>

3 Hazards identification

- Classification of the substance or mixture
  The product is not classified according to the Globally Harmonized System (GHS).
- 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.
- Label elements
- GHS label elements: Void
- Hazard pictograms: Void
- Signal word: Void
- Hazard statements: Void
- Classification system
- NFPA ratings (scale 0-4)
  Health = 0
  Fire = 0
  Reactivity = 0

(Contd. on page 2)
4 First aid measures

- **General information** Remove contaminated clothing.
  - **After inhalation**
    - Supply fresh air; consult doctor in case of complaints.
    - 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 a doctor.
  - **After swallowing**
    - Rinse out mouth and then drink plenty of water.
    - If symptoms persist consult doctor.

5 Firefighting measures

- **Suitable extinguishing agents**
  - Water spray
  - Foam
  - Alcohol resistant foam
- **For safety reasons unsuitable extinguishing agents**
  - Carbon dioxide
  - Extinguishing powder.
  - Lack of cooling capacity may permit re-ignition.
- **Special hazards arising from the substance or mixture**
  - In case of fire, the following can be released:
    - Smoke
    - Carbon monoxide and carbon dioxide
    - Hydrocarbons
    - Hydrogen cyanide (HCN)
  - In certain fire conditions, traces of other toxic gases cannot be excluded.
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information**
  - Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
  - Wear protective clothing.
  - Avoid formation of dust.
  - Do not breathe dust.
  - Avoid contact with eyes.
  - Do not breathe vapours.
  - Particular danger of slipping on leaked/spilled product.
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 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.

- **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 in cool, dry conditions in well sealed receptacles.
  - **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.

- **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.

- **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 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.
  - **Protection of hands**
    - No chemical-protective gloves required.
    - Use heat resistant gloves when handling hot/molten product.
  - **Eye protection**: Safety glasses
  - **Body protection**
    - Protective work clothing.
9 Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Information</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Appearance</strong></td>
<td></td>
</tr>
<tr>
<td>Form</td>
<td>solid</td>
</tr>
<tr>
<td>Color</td>
<td>milky white</td>
</tr>
<tr>
<td>Odor</td>
<td>Nearly odorless</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>no data available</td>
</tr>
<tr>
<td><strong>pH-value</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Change in condition</strong></td>
<td></td>
</tr>
<tr>
<td>Melting point/Melting range</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Boiling point/Boiling range</td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Auto igniting</strong></td>
<td>Product is not selfigniting.</td>
</tr>
<tr>
<td><strong>Danger of explosion</strong></td>
<td>Product does not present an explosion hazard. Risk of dust explosion if enriched with fine dust in the presence of air</td>
</tr>
<tr>
<td><strong>Explosion limits</strong></td>
<td></td>
</tr>
<tr>
<td>Lower</td>
<td>Not determined</td>
</tr>
<tr>
<td>Upper</td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Oxidizing properties</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Vapor pressure</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Density at 20°C (68 °F):</strong></td>
<td>&gt; 1 g/cm³ (&gt; 8.345 lbs/gal)</td>
</tr>
<tr>
<td><strong>Solubility in / Miscibility with</strong></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>Insoluble</td>
</tr>
<tr>
<td><strong>Segregation coefficient (n-octanol/water)</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Viscosity</strong></td>
<td></td>
</tr>
<tr>
<td>dynamic</td>
<td>Not applicable</td>
</tr>
<tr>
<td>kinematic</td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Other information</strong></td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>

10 Stability and reactivity

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Thermal decomposition / conditions to be avoided:</strong></td>
<td>No decomposition if used and stored according to specifications. Avoid impact, friction, heat, sparks, electrostatic charges.</td>
</tr>
<tr>
<td><strong>Incompatible materials:</strong></td>
<td>No further relevant information available.</td>
</tr>
<tr>
<td><strong>Hazardous decomposition products:</strong></td>
<td>Carbon monoxide and carbon dioxide Hydrogen cyanide (prussic acid) Hydrocarbons Possible in traces. Styrene Acrylonitril Phenol Acetophenone</td>
</tr>
</tbody>
</table>
11 Toxicological information

- Acute toxicity:

<table>
<thead>
<tr>
<th>LD/LC50 values that are relevant for classification:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
</tr>
<tr>
<td>Dermal</td>
</tr>
</tbody>
</table>

- 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)
    9003-54-7 Styrene/acrylonitrile copolymer (SAN) 3

  - NTP (National Toxicology Program)
    None of the ingredients is listed.

12 Ecological information

- Aquatic toxicity: No further relevant information available.

- Persistence and degradability: No further relevant information available.

- Bioaccumulative potential: No further relevant information available.

- Additional ecological information:

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

13 Disposal considerations

- 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 local/official regulations.

- Uncleaned packagings:

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

14 Transport information

- UN-Number
  DOT, ADR, ADN, IMDG, IATA Void

- UN proper shipping name
  DOT, ADN, IMDG, IATA Void
  ADR Void

(Contd. on page 6)
### 15 Regulatory information

- **TSCA (Toxic Substances Control Act)**
  - All ingredients are listed.

- **Cancerogenity categories**
  - **MAK (German Maximum Workplace Concentration)**
    - None of the ingredients is listed.

- **GHS label elements** Void
  - **Hazard pictograms** Void
  - **Signal word** Void
  - **Hazard statements** Void

- **National regulations**

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

- **Other regulations, limitations and prohibitive regulations**
  - The monomer compounds of this product are listed in:
    - Toxic Substance Control Act TSCA (USA)
    - Canadian Domestic Substance List DSL
    - Existing and New Chemical Substance List ENCS (Japan)
    - Australian Inventory of Chemical Substances AICS (Australia)
    - Korean Existing Chemical Inventory KECI

### 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.

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

- **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)
  - IMDG: International Maritime Code for Dangerous Goods
  - DOT: US Department of Transportation
  - IATA: International Air Transport Association
### Trade name: P430 ABS Model / M30 ABS Model

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFPA</td>
<td>National Fire Protection Association (USA)</td>
</tr>
<tr>
<td>HMIS</td>
<td>Hazardous Materials Identification System (USA)</td>
</tr>
<tr>
<td>LC50</td>
<td>Lethal concentration, 50 percent</td>
</tr>
<tr>
<td>LD50</td>
<td>Lethal dose, 50 percent</td>
</tr>
</tbody>
</table>