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

- **Product identifier**

- **Trade name:** ABS-M30i 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
 Düsseldorf 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**

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

- **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**

- **Labelling according to EU guidelines:** Observe the general safety regulations when handling chemicals

- **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:** Mixtures

- **Description:** Polymer

- **Dangerous components:** Void

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· **Other components:** Thermoplastic acrylic copolymer

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**

Wash with soap and water.

If skin irritation continues, consult a doctor.

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.

Remove contact lenses, if present and easy to do.

· **After swallowing**

Rinse out mouth and then drink plenty of water.

Do not induce vomiting!

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**

Water spray

Foam

· **For safety reasons unsuitable extinguishing agents**

Water with full jet.

Carbon dioxide

Extinguishing powder.

ABC powder

Lack of cooling capacity may permit re-ignition.

· **Special hazards arising from the substance or mixture**

Formation of toxic gases is possible during heating or in case of fire.

Irritant gases/vapors

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.

· **Advice for firefighters**· **Protective equipment:** Wear self-contained respiratory protective device.

6 Accidental release measures

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

Avoid formation of dust.

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- Do not breathe dust.*
- Keep away from ignition sources*
- Avoid contact with eyes.*
- Danger of slipping on leaked/spilled product.*
- **Environmental precautions:** *Do not allow to enter sewers/ surface or ground water.*
- **Methods and material for containment and cleaning up:**
 - Allow to solidify. 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.*

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.*
 - Any deposit of dust which cannot be avoided must be regularly removed.*
 - Avoid contact with skin and eyes.*
 - Make sure that all applicable workplace limits are observed.*
 - Avoid contact with hot product.*
- **Information about protection against explosions and fires:**
 - Protect against electrostatic charges.*
 - Keep ignition sources away - Do not smoke.*
 - Protect from heat.*
 - Risk of dust explosion if enriched with fine dust in the presence of air*
- **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 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.*
- **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**
 - Keep away from foodstuffs, beverages and feed.*
 - Do not eat, drink, smoke or sniff while working.*
 - Do not inhale dust / smoke / mist.*
 - Avoid contact with the eyes and skin.*
 - 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.*

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- **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*
 - **Odor:** *weak/faint*
 - **Odor 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 determined*
- **Flammability (solid, gaseous)** *combustible*
- **Ignition temperature:** *Not determined*
- **Decomposition temperature:** *Not determined*
- **Auto igniting:** *Product is not selfigniting.*
- **Danger of explosion:** *Risk of dust explosion if enriched with fine dust in the presence of air*
- **Explosion limits:**
 - **Lower:** *Not determined*
 - **Upper:** *Not determined*
- **Oxidizing properties** *Not applicable*
- **Vapor pressure:** *negligible*
- **Density:** *> 1 g/cm³ (> 8.345 lbs/gal)*
- **Relative density at 20 °C (68 °F)** *> 1 (H₂O = 1)*
- **Vapour density (AIR = 1)** *Not determined*
- **Evaporation rate** *negligible*
- **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*

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- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
*No decomposition if used and stored according to specifications.
 Avoid impact, friction, heat, sparks, electrostatic charges.*
- **Possibility of hazardous reactions** *Risk of dust explosion if enriched with fine dust in the presence of air*
- **Conditions to avoid** *No further relevant information available.*
- **Incompatible materials:** *Strong oxidizing agents*
- **Hazardous decomposition products:**
*Irritant gases/vapors
 Poisonous gases/vapors
 Smoke
 Carbon monoxide and carbon dioxide
 Hydrocarbons
 Hydrogen cyanide (prussic acid)
 Styrene
 Aldehyde
 Phenol
 Acrylonitril
 Nitrogen oxides (NO_x)*

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**
estimated

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 effects known.*
- **Subacute to chronic toxicity:** *no data available*
- **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)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is 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.*

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- **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 |
| · 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. |

15 Regulatory information

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

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

None of the ingredients is listed.

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

None of the ingredients is listed.

- **Carcinogenicity categories**

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

None of the ingredients is listed.

- **National regulations**

- **Disturbance regulations:** Directive 96/82/EC does not apply.
- **Other regulations, limitations and prohibitive regulations**

Product resp. its monomers are listed in:
 Toxic Substance Control Act TSCA (USA)
 Canadian Domestic Substance List DSL
 Existing and New Chemical Substance List ENCS (Japan)

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*Korean Existing Chemicals List KECL**Australian Inventory of Chemical Substances AICS (Australia)**· 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.**· Sources These data are based on information submitted by pre-suppliers.*

USA