

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

Printing date 18.10.2012

Revision: 18.10.2012

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

- **Date of issue:** 15.05.2007
- **1.1 Product identifier**
- **Trade name:** ABS-ESD7
- **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

- **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 with carbon nano tubes
- **Dangerous components:** Void

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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.
- **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.
 - Remove contact lenses, if present and easy to do. Continue rinsing.
- **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.
 - Do not breathe vapours.
 - 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.

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- 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:**
 - Protective gloves
 - Use heat resistant gloves when handling hot/molten product.
 - Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
 - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
 - Check the permeability prior to each renewed use of the glove.
 - Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
 - To avoid skin problems reduce the wearing of gloves to the required minimum.

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- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

Protective gloves should be replaced at first signs of wear.

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:** Safety glasses

- **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: different according to colour

- **Smell:** weak/faint

- **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

- **Inflammability (solid, gaseous)** Not determined.

- **Ignition temperature:** not determined

- **Decomposition temperature:** not determined

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

- **Danger of explosion:** 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 classified as oxidising

- **Vapor pressure:** Not applicable.

- **Density at 20°C:** > 1 g/cm³

- **Solubility in / Miscibility with**

Water: insoluble

- **Viscosity:**

dynamic: not applicable

kinematic: not applicable

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

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

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**
- **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** *Disposal must be made according to official regulations.*
- **Waste disposal key number:** *According to local/national regulations.*

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- **European waste catalogue:**
Waste disposal key numbers from EWC have to be assigned depending on origin and processing. For that reason waste disposal key numbers different from that listed below may be possible.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- | | |
|--|--|
| · 14.1 UN-Number
· ADR, IMDG, IATA | Void |
| · 14.2 UN proper shipping name
· ADR
· IMDG, IATA | Void
Void |
| · 14.3 Transport hazard class(es)
· ADR, 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**
 - **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 Chemicals List KECL
- **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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 Parkstraße 29 Fax: +49 - 2151 - 652086-9
 D-47829 Krefeld

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· 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

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

· * Data compared to the previous version altered.

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