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## SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<b>Product Name</b>	ABS-ESD7™ Model Material
<b>Synonyms</b>	ABS
<b>SSYS Part Number</b>	400616-0001
<b>Recommended Use</b>	Additive manufacturing
<b>Company</b>	No information available.
<b>Importer</b>	Stratasys Korea Limited c/o Expeditors Korea Ltd., KMTC 6-1 gate, Gimpo Int'l airport Cargo Terminal Seoul 157-240 Korea, Republic of Contact: Ms Sarah Chae TEL: +82-2-20462239
<b>Supplier</b>	Stratasys Inc 7665 Commerce Way Eden Prairie, MN 55344 TEL: 1(952) 937 3000
<b>Emergency Telephone Number</b>	1(952) 937 3000 +82-1090102285 +49 722 97772281 - Global - English language response +85 2 975 70887 - Asia Pacific - Multi lingual response
<b>E-mail Address</b>	objet-info@stratasys.com

## SECTION 2. HAZARDS IDENTIFICATION

### GHS-Classification

### Health Hazard

This mixture is not classified as dangerous according to Korean legislation

### Physical Hazards

None

### Environmental Hazards

### GHS Label elements, including precautionary statements

**Signal Word** None

**Precautionary Statements****Other hazards which do not result in classification**

- No information available

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS-No	Weight %
ABS resin	9003-56-9	>96
Colorants	-	<4

Only non-hazardous and/or USP Class VI colorants are used. No leachable/extractable or heavy metal colorants are used. Some of the colorants, such as titanium dioxide and carbon black, have dust hazards. These hazards are not germane as the colorants are encapsulated in a fully reacted polymer.

**SECTION 4. FIRST AID MEASURES**

- A. Eye Contact** Rinse thoroughly with plenty of water, also under the eyelids. If symptoms persist, call a physician.
- B. Skin Contact** Wash off with water. If molten polymer contacts the skin, cool rapidly with cold water. Do not attempt to peel cured polymer from skin. Removal of solidified molten material from skin requires medical assistance.
- C. Inhalation** Move to fresh air. If symptoms persist, call a physician.
- D. Ingestion** Drink plenty of water. Do NOT induce vomiting. If symptoms persist, call a physician.
- E. Most Important Symptoms/Effects** No information available.
- F. Indication of immediate medical attention and special treatment needed, if necessary.** Treat symptomatically.

**SECTION 5. FIRE-FIGHTING MEASURES**

- A. Suitable Extinguishing Media** Water. Dry powder. Foam. Carbon dioxide (CO<sub>2</sub>).
- Unsuitable Extinguishing Media** No information available.
- B. Specific Hazards Arising from the Chemical** Burning produces obnoxious and toxic fumes. Aldehydes. Carbon monoxide. Carbon dioxide (CO<sub>2</sub>). Hydrogen cyanide.
- C. Protective Equipment and Precautions for Firefighters** Wear self-contained breathing apparatus and protective suit.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

- A. Personal Precautions** Use personal protective equipment. Ensure adequate ventilation.
- B. Environmental Precautions** Prevent further leakage or spillage if safe to do so.
- C. Methods and materials for containment and cleaning up** Sweep up and shovel into suitable containers for disposal.

**SECTION 7. HANDLING AND STORAGE**

- A. Handling** Handle in accordance with good industrial hygiene and safety practice. Wear personal protective equipment. Ensure adequate ventilation. Prevent contact with molten product. Do not eat, drink or smoke when using this product. Do not take internally. Wash thoroughly after handling.
- B. Storage** Keep tightly closed in a dry and cool place.
- Incompatible Products** Strong oxidizing agents.

## SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### A. Exposure Guidelines

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

### B. Engineering Measures

Ensure adequate ventilation, especially in confined areas.

### C. Personal Protective Equipment

#### Respiratory Protection

No protective equipment is needed under normal use conditions.

#### Eye/Face Protection

Safety glasses with side-shields. For handling molten material, use of a faceshield is recommended.

#### Hand Protection

When handling hot material, use heat resistant gloves.

#### Skin and Body Protection

No protective equipment is needed under normal use conditions.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- |                                                  |                                |                                |
|--------------------------------------------------|--------------------------------|--------------------------------|
| <b>A. Appearance</b>                             | Black                          |                                |
| <b>Physical State</b>                            | Solid (compressed)             |                                |
| <b>B. Odor</b>                                   | None                           |                                |
| <b>C. Odor Threshold</b>                         | No data available              |                                |
| <b>D. pH</b>                                     | No data available              |                                |
| <b>E. Melting Point/Range</b>                    | No data available              |                                |
| <b>F. Initial Boiling Point</b>                  | No data available              |                                |
| <b>Boiling Point/Boiling Range</b>               | No data available              |                                |
| <b>G. Flash Point</b>                            | Not determined                 |                                |
| <b>H. Evaporation Rate</b>                       | No data available              |                                |
| <b>I. Flammable Properties</b>                   | Not applicable                 |                                |
| <b>J. Flammability Limits in Air</b>             | <b>Upper</b> No data available | <b>Lower</b> No data available |
| <b>K. Vapor Pressure</b>                         | No data available.             |                                |
| <b>L. Solubility</b>                             | No information available.      |                                |
| <b>M. Vapor Density</b>                          | No data available.             |                                |
| <b>N. Relative density</b>                       | No data available              |                                |
| <b>O. Partition Coefficient: n-octanol/water</b> | No data available.             |                                |
| <b>P. Autoignition Temperature</b>               | No data available              |                                |
| <b>Q. Decomposition Temperature</b>              | No data available              |                                |
| <b>R. Viscosity</b>                              | No data available              |                                |
| <b>S. Molecular Weight</b>                       | No data available              |                                |
| <b>T. Specific Gravity</b>                       | No data available.             |                                |
| <b>U. VOC Content (%)</b>                        | No data available              |                                |

## SECTION 10. STABILITY AND REACTIVITY

- A. Stability** Stable under normal conditions.
- B. Hazardous Reactions** None under normal processing.
- C. Conditions to Avoid** Incompatible products.
- D. Incompatible Products** Strong oxidizing agents.

E. Hazardous Decomposition Products

Carbon oxides. Aldehydes. Hydrogen cyanide.

**SECTION 11. TOXICOLOGICAL INFORMATION**

A. Information on the likely routes of exposure

<p><b>Inhalation</b></p> <p><b>Eye Contact</b></p> <p><b>Skin Contact</b></p> <p><b>Ingestion</b></p>	<p>Exposure to volatiles released during hot processing may cause respiratory tract irritation</p> <p>Contact with eyes may cause irritation.</p> <p>Contact with molten material will cause thermal burns.</p> <p>Not an expected route of exposure. Ingestion may cause stomach discomfort.</p>
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B. Delayed and immediate effects and also chronic effects from short and long term exposure

<p><b>Irritation</b></p> <p><b>Corrosivity</b></p> <p><b>Sensitization</b></p> <p><b>Carcinogenic Effects</b></p> <p><b>Mutagenic Effects</b></p> <p><b>Reproductive Toxicity</b></p> <p><b>STOT - single exposure</b></p> <p><b>STOT - repeated exposure</b></p> <p><b>Target Organ Effects</b></p> <p><b>Hazardous to the Aquatic Environment</b></p> <p><b>Aspiration Hazard</b></p>	<p>No information available.</p> <p>No information available.</p> <p>No information available.</p> <p>No information available.</p> <p>No information available.</p> <p>No information available.</p> <p>No information available.</p> <p>No information available.</p> <p>Eyes. Skin.</p> <p>No information available</p> <p>No information available.</p>
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C. Numerical measures of toxicity

<b><u>Product Information</u></b>	
<p><b>LD50 Oral</b></p> <p><b>LD50 Dermal</b></p> <p><b>Inhalation</b></p> <p><b>Gas</b></p> <p><b>Dust/Mist</b></p> <p><b>Vapor</b></p>	<p>No information available.</p> <p>No information available.</p> <p>No information available.</p> <p>No information available.</p> <p>No information available.</p>

**Carcinogenicity**                      The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	IARC
ABS resin 9003-56-9 ( >96 )	Group 3

IARC: (International Agency for Research on Cancer)  
Group 3 - Not Classifiable as to its Carcinogenicity to Humans

**SECTION 12. ECOLOGICAL INFORMATION**

A. Aquatic and Ecotoxicity

**Ecotoxicity Effects**                      Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants

**B. Persistence and Degradability**      No information available.

**C. Bioaccumulation**                      No information available.

**D. Mobility**                                  No information available.

**E. Other Adverse Effects**                No information available.

**SECTION 13. DISPOSAL CONSIDERATIONS**

- A. Waste from Residues / Unused Products** Dispose of in accordance with local regulations.
- B. Contaminated Packaging** Empty containers should be taken to an approved waste handling site for recycling or disposal

**SECTION 14. TRANSPORT INFORMATION**

- A. UN-Number** Not regulated.
- B. Proper Shipping Name** Not regulated.
- C. Hazard Class** Not regulated.
- D. Packing Group** Not regulated.
- E. Marine Pollutant** Not regulated

**SECTION 15. REGULATORY INFORMATION**

**A. Industrial Safety and Health Law:**  
Not applicable

**B. Toxic Chemicals Control Law**  
Not applicable

**C. Dangerous Material Safety Control**  
Not applicable

**D. Wastes Management**  
Dispose of in accordance with local regulations

**E. Other Regulations**

**RESTRICTIONS - REACH TITLE VIII International Inventories** No information available.

<b>TSCA</b>	Complies
<b>EINECS/ELINCS</b>	Not determined
<b>DSL/NDSL</b>	Not determined
<b>PICCS</b>	Not determined
<b>ENCS</b>	Not determined
<b>IECSC</b>	Not determined
<b>AICS</b>	Not determined
<b>KECL</b>	Not determined

**Legend**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**SECTION 16. OTHER INFORMATION**

- A. Prepared By                      Product Stewardship  
                                            23 British American Blvd.  
                                            Latham, NY 12110  
                                            1-800-572-6501
  
- B. Issuing Date                      11-Nov-2015
  
- C. Revision Date                      11-Nov-2015  
    Revision Number                      0
  
- D. Other Information                      No information available

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**End of Safety Data Sheet**