

Issuing Date 05-Nov-2015

Revision Date 05-Nov-2015

Revision Number 0

SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name	ABS-M30™ / P430™ ABS / P430XL™ ABS / ABSplus™ Model Material
Synonyms	ABS
SSYS Part Number	400626-0001
Recommended Use	Additive manufacturing
Company	No information available.
Importer	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
Supplier	Stratasys Inc 7665 Commerce Way Eden Prairie, MN 55344 TEL: 1(952) 937 3000
Emergency Telephone Number	1(952) 937 3000 +82-1090102285 +49 722 97772281 - Global - English language response +85 2 975 70887 - Asia Pacific - Multi lingual response
E-mail Address	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 (CO₂).
- Unsuitable Extinguishing Media** No information available.
- B. Specific Hazards Arising from the Chemical** Burning produces obnoxious and toxic fumes. Aldehydes. Carbon monoxide. Carbon dioxide (CO₂). 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

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

- Inhalation** Exposure to volatiles released during hot processing may cause respiratory tract irritation
- Eye Contact** Contact with eyes may cause irritation.
- Skin Contact** Contact with molten material will cause thermal burns.
- Ingestion** Not an expected route of exposure. Ingestion may cause stomach discomfort.

B. Delayed and immediate effects and also chronic effects from short and long term exposure

- Irritation** No information available.
- Corrosivity** No information available.
- Sensitization** No information available.
- Carcinogenic Effects** No information available.
- Mutagenic Effects** No information available.
- Reproductive Toxicity** No information available.
- STOT - single exposure** No information available.
- STOT - repeated exposure** No information available.
- Target Organ Effects** Eyes. Skin.
- Hazardous to the Aquatic Environment** No information available
- Aspiration Hazard** No information available.

C. Numerical measures of toxicity

- Product Information**
- LD50 Oral** No information available.
- LD50 Dermal** No information available.
- Inhalation**
- Gas** No information available.
- Dust/Mist** No information available.
- Vapor** No information available.

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

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.

TSCA	Complies
EINECS/ELINCS	-
DSL/NDSL	-
PICCS	-
ENCS	-
IECSC	-
AICS	-
KECL	-

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	05-Nov-2015
C. Revision Date Revision Number	05-Nov-2015 0
D. Other Information	No information available

General Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet