STRATASYS®	ABS-M30 Model
Material Safety Data Sheet	107118-0002

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Product Name	ABS-M30 Model
Chemical Family	Synthetic thermoplastic polymer
General Use	Filament for Stratasys® Inc. FDM™ modeler
Manufacturer and Address	Stratasys Inc. 14950 Martin Drive Minneapolis, MN 55344-2020 USA
Emergency Telephone Number	+1 952-937-3000

2. COMPOSITION, INGREDIENT INFORMATION

COMPONENT	CAS #	%	OSHA/PEL	ACGIH/TLV
This product does not contain any reportable hazardous materials.				

3. HAZARDS IDENTIFICATION

Emergency Overview	• Slight or no odor. • Spilled material may create slipping hazard. • Can burn in a fire creating dense toxic smoke. • Molten plastic can cause severe thermal burns. • Fumes produced during melt processing may cause eye, skin, and respiratory tract irritation. Severe over-exposure may result in nausea, headache, chills, and fever. • Secondary operations, such as grinding, sanding, or sawing can produce dust which may present an explosion or respiratory hazard.			
HMIS Ratings	Health: 0	Flammability: 1	Reactivity: 0	PPE = B
Inhalation	See Emergency Overview above.			
Eye Contact	Can cause mechanical irritation if dusts are generated.			
Skin Contact	Unlikely to cause irritation even on repeated contact.			
Ingestion	No hazard in normal industrial use.			
Skin Absorption	No absorption hazard in normal industrial use.			
Chronic/Carcinogenicity	NTP: Not Tested.	OSHA: Not Regulated	IARC: Not Listed	
Threshold Limit Value	No established value. Product is inert.			

NOTE: OSHA, IARC and/or NTP have listed carbon black and heavy metals, present in some colorants, as carcinogens. If these colorants are present in this product, they are shown in SECTION 2. These colorants are essentially bound to the plastic matrix and are unlikely to contribute to workplace exposure under recommended processing conditions.

Processing fumes may cause irritation to the eyes, skin, and respiratory tract. In cases of severe exposure, nausea and headache can also occur.

Grease-like processing fume condensates on ventilation ductwork, molds, and other surfaces can cause irritation and injury to skin.

MEDICAL RESTRICTIONS: There are no known human health effects aggravated by exposure to this product. However, certain sensitive individuals and individuals with respiratory impairments may be affected by exposure to components in the processing vapors.

4. EMERGENCY AND FIRST AID MEASURES

Inhalation	No specific treatment is necessary since this material is not likely to be hazardous by inhalation.
Skin Contact	Wash with soap and water. Get medical attention if irritation develops or persists. For hot product, immediately immerse in or flush affected area with large amounts of cold water to dissipate heat. Cover with clean cotton sheeting or gauze and get prompt medical attention.
Processing Fumes	Processing fumes inhalation may be irritating to the respiratory tract. If symptoms are experienced remove victim from the source of contamination or move victim to fresh air and obtain medical advice.
Eye Contact	Immediately flush eyes with plenty of water. Get medical attention if irritation develops or persists. After initial flushing, remove any contact lenses.
Ingestion	No hazard in normal industrial use. Do not induce vomiting. Seek medical attention if symptoms develop.

5. FIRE-FIGHTING MEASURES & EXPLOSION HAZARD DATA

Fire Fighting Instructions	Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products..
Extinguishing Media	Water spray and foam. Carbon dioxide and dry chemical are not recommended because their lack of cooling capacity may permit re-ignition
Conditions of Flammability	Requires a continuous flame source to ignite.
Explosion Data	Material not sensitive to mechanical impact but is sensitive to static discharge under dust cloud conditions.
Hazardous Combustion Products	Intense heat, smoke, carbon dioxide, carbon monoxide, hydrocarbon fragments hydrogen cyanide.

6. ACCIDENTAL RELEASE MEASURES

General	Gather and store in a closed container pending a waste disposal evaluation. Allow molten material to solidify before disposal.

7. HANDLING & STORAGE

Handling	Follow recommendations on label and in processing guide. Prevent contact with skin and eyes. Use good industrial hygiene practices. Provide adequate ventilation. Secondary operations such as grinding, sanding, or sawing may produce a dust explosion hazard. use aggressive housekeeping activities to prevent dust accumulation: employ bonding, grounding, venting, and explosion relief provisions in accordance with accepted engineering practices.
Storage	Store in a cool dry place. Avoid excessive heat and ignition sources.

8. EXPOSURE CONTROLS & PERSONAL PROTECTION

Engineering Controls	Based on emission rates, no emission control equipment or special ventilation is necessary for employee health and safety.
Personal Protection:	
Respiratory	Based on emission rates, no personal respiratory equipment is necessary for employee health and safety.
Eye/Face Protection	Wear safety glasses with side shields when removing support material from finished part.
Skin	Wear long pants, long sleeved shirtand well insulated gloves when removing parts from hot build chamber.

9. PHYSICAL & CHEMICAL PROPERTIES

Physical State	Solid
Odor	Slight Odor
Melting Point	This product does not exhibit a sharp melting point but softens gradually over a wide range of temperatures.
Vapor Pressure	Negligible
Specific Gravity (water = 1)	>1
Water Solubility	Insoluble
% Volatiles	Negligible
Evaporation Rate	Negligible
Octanol/Water Partition Coefficient	Not Established

10. STABILITY & REACTIVITY

Stability	Stable
Reactivity	Not reactive under recommended conditions of handling, storage, processing, and use.
Conditions to Avoid	Do not exceed melt temperature recommendations in product literature. In order to avoid autoignition/hazardous decomposition of hot thick masses of plastic, purgings should be collected in small, flat, shapes or thin strands to allow for rapid cooling. Quench in water. Do not allow product to remain in barrel at elevated temperatures for extended periods of time: purge with a general purpose resin.
Hazardous Decomposition Products	Processing fumes evolved at recommended processing conditions may include trace levels of the following materials: styrene, acrylonitrile, ethylbenzene, acetaldehyde, acetophenone, cumene, acrylates, 4-vinylcyclohexene, phenols, cyclopentanone

11. TOXICOLOGICAL DATA

ACUTE HEALTH HAZARDS			
Acute Oral	Oral LD50 Rat >5 g/kg Oral toxicity is estimated from tests on similar materials.		
Skin Contact	Product not considered primary skin irritant. Draize Skin Primary Irritation Score (rabbit) for similar products, in finely divided form, for a 24-hour exposure is 0. Not expected to be a skin sensitizer based on results of Modified Buehler Guinea Pig Sensitization Test from similar products.Derma1 LD50 (rabbit) > 2g/kg, estimated.		
Eye Contact	Product not considered primary eye irritant. When similar products, in finely divided form, were placed into the eyes of rabbits, slight transient redness or discharge occurred. This is consistent with the expected slightly abrasive nature of the resin particles.		
SUBCHRONIC HEALTH HAZARDS			
Subchronic Toxicity	No data available		
CHRONIC HEALTH HAZARDS			
Carcinogenic Properties	NTP: Not Tested.	OSHA: Not Regulated	IARC: Not Listed

12. ECOLOGICAL INFORMATION

General	This material is not expected to be harmful to the ecology.

13. DISPOSAL INFORMATION

Waste Disposal	Recycling is encouraged. Landfill or incinerate in accordance with federal, state and local requirements. Collected processing fume condensates and incinerator ash should be tested to determine waste classification.
Possible EPA Waste Codes	No data

14. TRANSPORT INFORMATION (NOT MEANT TO BE ALL-INCLUSIVE)

Department of Transportation (D.O.T.)	This product is not regulated by D.O.T.
Canadian TDG Information	This product is not regulated by TDG.
IATA Regulation	This product is not regulated.
IMO Regulation	This product is not regulated.

15. REGULATORY INFORMATION (NOT MEANT TO BE ALL-INCLUSIVE)

All components of this product are listed on these chemical inventories**:** U.S. TSCA, Canadian DSL, EU EINECS, Japanese ENCS, Korean ECL, Australian AICS.

U.S. Regulations

EPA SARA Chemical Listings

No SARA 3 13-listed chemicals in this product.

California Proposition 65

Not Applicable

Toxic Substances Control Act (TSCA)

This product is in compliance with all rules and orders of TSCA

State Right-to-Know

OSHA Hazard Communication Standard

This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Canadian Regulations

WHMIS Information: The Canadian Workplace Hazardous Materials Information System (WHMIS) Classification for this product is: D2

16. OTHER INFORMATION

THE INFORMATION contained in the PROCEEDING report is based upon current knowledge, our experience with the product, and is not exhaustive. While not guaranteed, the information presented herein was prepared by a competent, technical professional and is true and accurate to the best of our knowledge. The information applies to product as defined by the specifications. If the product is mixed with other substances, the customer must confirm that no new hazards exist. In all cases, the user is not exempt from following all legal, administrative and regulatory procedures relating to the product, personal hygiene, and the integrity of the work environment. Stratasys Inc. shall not be held liable for any damage resulting from handling or from contact and use with the above product.

Revision History

Revision	Revision Date
107118-0001	2007-01-30
107118-0002	2007-05-30