



## 1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Product Name	Polycarbonate-ISO
Common Name	PC-ISO
General Use	Thermal plastic filament for Stratasys® 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
Synthetic thermoplastic polymer filament	111211-39-3			

This product is not considered hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR § 1910.1200.

## 3. HAZARDS IDENTIFICATION

Emergency Overview	Filament with slight or no odor. 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. Secondary operations, such as grinding, sanding, or sawing, can produce dust that may present an explosion or respiratory hazard.
HMIS Ratings	Health: 0      Flammability: 1      Reactivity: 0
Skin Absorption	No absorption hazard in normal industrial use.
Eye Contact	Dust can cause mechanical irritation.
Skin Contact	Unlikely to cause irritation even on repeated contact. Molten plastic, however, can cause severe thermal burns.
Ingestion	No hazard in normal industrial use
Chronic and Carcinogenicity	NTP: not tested, OSHA: not regulated, IARC: not listed
Medical Restrictions	There are no known hazardous health effects caused by exposure to this product. People with respiratory impairments however, may be affected by exposure to components in 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	Remove contaminated clothing. Wash thoroughly with soap and water immediately. Get medical attention if irritation or burns develop.
Eye Contact	In cases of contact, hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.
Ingestion	No hazard in normal industrial use. Do not induce vomiting. Seek medical attention if symptoms develop.

#### 5. FIRE-FIGHTING MEASURES & EXPLOSION HAZARD DATA

Flash Point	Not applicable
Autoignition Temperature	630° C (1166° F), estimated
Extinguishing Media	Water spray and foam
Special Fire-Fighting Procedures	Approved pressure demand breathing apparatus and protective clothing should be used for all fires. Water spray is the preferred extinguishing medium.
Unusual Fire and Explosion Hazards	Impact Sensitivity: Not sensitive to mechanical impact Static Discharge: Not sensitive to static discharge.
Hazardous Combustion Products	Hazardous combustion products may include intense heat, dense smoke, carbon monoxide, carbon dioxide, and hydrocarbon fragments.
Lower Flammable Limit	Not established
Upper Flammable Limit	Not established
Conditions of Flammability	Requires a continuous flame source to ignite

#### 6. ACCIDENTAL RELEASE MEASURES

General	Gather material and place in proper container for disposal
Specific	Contain waste. Sweep up material for recycling or disposal. Do not wash residues into drains or other waterways.



## 7. HANDLING & STORAGE

Handling	Follow instructions as indicated in training materials and user guides.
Storage	Keep materials dry and avoid temperatures over 60° C (140° F).

## 8. EXPOSURE CONTROLS & PERSONAL PROTECTION

Ventilation	Use with adequate ventilation to provide a continuous supply of fresh air
Respiratory	Not needed. If dust is produced in a secondary operation, use a respirator approved for protection from dust.
Eye Protection	Safety glasses with side shields are recommended for any type of handling. Dust-tight goggles are recommended for dusty operations of areas where vapors accumulate.
Skin	Wear well-insulated gloves when handling melt

## 9. PHYSICAL & CHEMICAL PROPERTIES

Appearance	Solid
Odor	Plastic filament with slight or no odor
Vapor Pressure (mmHg)	Negligible
Vapor Density	Not applicable
Melting Point	This product does not exhibit a sharp melting point, but softens gradually over a wide range of temperature.
Boiling Point	Not applicable
Specific Gravity (Water =1)	1.2
Volatile By Volume (Water)	Negligible
Solubility In Water	Insoluble
pH	Not applicable
Octanol/Water Partition Coefficient	Not established

## 10. STABILITY & REACTIVITY

Stability	Stable
Reactivity	Not reactive under conditions of handling, storage,



	processing, and use.
Conditions to Avoid	Do not exceed liquifier temperatures of 400° C (752° F).
Hazardous Polymerization	Not applicable
Incompatibility	Not applicable
Hazardous Decomposition Products	Processing fumes may include trace levels of phenol, alkylphenols, and diarylcarbonate.

## 11. TOXICOLOGICAL DATA

<b>Acute Health Hazards:</b>	
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 – consistent with the expected slightly abrasive nature of the resin particles.
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. Dermal LD50 (rabbit) > 2g/kg, estimated.
Acute Oral	Oral LD50 (Rat) >=500 mg/kg, estimated
<b>Subchronic Health Hazards:</b>	
Subchronic Toxicity	No data available
<b>Chronic Health Hazards:</b>	
Carcinogenic Properties	NTP: Not tested; OSHA: Not regulated; IARC: Not listed

## 12. ECOLOGICAL INFORMATION

General	Not expected to present any significant ecological problems
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## 13. DISPOSAL CONSIDERATIONS

Product is not a RCRA hazardous waste. Disposal of wastes and used containers must be in accordance with applicable federal, state and local regulations.



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

U.S. Department of Transportation (D.O.T.)	This product is not regulated by D.O.T. when shipped domestically by land
Canadian TDG Information	This product is not regulated by TDG when shipped domestically by land

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

This product does not contain reportable quantities of substances subject to supplier notification.

TSCA Status	This product complies with the Chemical Substance Inventory requirements of the US EPA Toxic Substances Control Act (TSCA)
WHMIS Classification	Not a controlled product

## 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 the 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
1.0	11/24/2003
1.1	4/14/04