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Revision Number 3.04

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****Product identifier****Product Name** ASA Black**Other means of identification****Product Code(s)** SDS-000011 EN A BLK**PN (Part Number)** 311-21200, 333-60501, 333-90501, 355-02142, 331-20557, 363-00106**Synonyms** None**Recommended use of the chemical and restrictions on use****Recommended use** Additive manufacturing**Uses advised against** No information available**Details of the supplier of the safety data sheet****Manufacturer Address**

Stratasys Corporate headquarters United States  
9600 West 76th Street Suite #108  
Eden Prairie, MN 55344  
United States  
Local: +1 952-294-3900  
Phone: +1 952-937-3000

**Emergency telephone number****Emergency Telephone** +1-352-323-3500 - Americas - Multi lingual response 24/7**E-mail address** info@Stratasys.com**2. HAZARDS IDENTIFICATION****Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Reproductive toxicity	Category 2
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**Label elements****Warning****Hazard statements**

Suspected of damaging fertility or the unborn child

**Appearance** Monofilament**Physical state** Solid**Odor** No information available**Precautionary Statements - Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

Not applicable.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Mixture**

Chemical name	CAS No.	Weight-%	Proprietary
Styrene (Benzene, ethenyl)	100-42-5	0.3-1	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

Some of the chemicals have dust hazards. These hazards are not germane, as the chemicals are encapsulated in a fully reacted polymer

### 4. FIRST AID MEASURES

**Description of first aid measures****General advice**

Show this safety data sheet to the doctor in attendance.

**Inhalation**

Remove to fresh air.

**Eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

**Skin contact**

Wash skin with soap and water when in contact with molten residues.

**Ingestion** Drink plenty of water. Do not induce vomiting without medical advice. Call a physician immediately.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** None known.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media** Foam. Water. Carbon dioxide (CO<sub>2</sub>). Dry chemical. Alcohol resistant foam.

**Unsuitable extinguishing media** None known.

**Specific hazards arising from the chemical** None known.

**Explosion data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Special protective equipment for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Use personal protective equipment as required. Avoid contact with skin and eyes. Remove all sources of ignition. Sweep up to prevent slipping hazard.

**Environmental precautions**

**Environmental precautions** Do not flush into surface water or sanitary sewer system. Keep out of waterways.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

**Prevention of secondary hazards** May form combustible dust concentrations in air if small particles are generated during further processing, handling or by other means. Avoid dust accumulation in enclosed space. Prevent dust cloud. Remove all sources of ignition.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling** Use personal protection equipment. Avoid contact with skin and eyes, when handling melted filament. If small particles are generated during further processing, handling, or by other means, combustible dust concentrations in air may form. Use respirator.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Store locked up.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

**Exposure Limits**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Styrene (Benzene, ethenyl) 100-42-5	STEL: 20 ppm TWA: 10 ppm	TWA: 100 ppm (vacated) TWA: 50 ppm (vacated) TWA: 215 mg/m <sup>3</sup> (vacated) STEL: 100 ppm (vacated) STEL: 425 mg/m <sup>3</sup> Ceiling: 200 ppm	IDLH: 700 ppm TWA: 50 ppm TWA: 215 mg/m <sup>3</sup> STEL: 100 ppm STEL: 425 mg/m <sup>3</sup>

**Appropriate engineering controls**

**Engineering controls** If dust is generated during further processing provide exhaust ventilation.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Goggles. Safety glasses with side-shields.

**Hand Protection** Wear suitable gloves.

**Skin and body protection** Impervious clothing.

**Respiratory protection** Minimize dust generation and accumulation. Wear respiratory protection.

**General hygiene considerations** Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

**Physical state** Solid  
**Appearance** Monofilament  
**Odor** No information available  
**Color** Black  
**Odor threshold** Not applicable

**Explosive properties** No data available  
**Oxidizing properties** No data available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	Not applicable	Not applicable
<b>Melting point / freezing point</b>	Not applicable	Not applicable
<b>Boiling point / boiling range</b>	Not applicable	Not applicable
<b>Flash point</b>	> 380 °C / > 716 °F	
<b>Evaporation rate</b>	Not applicable	Not applicable
<b>Flammability (solid, gas)</b>	Not applicable	Not applicable

<b>Flammability Limit in Air</b>		None known
<b>Upper flammability limit:</b>	Not applicable	
<b>Lower flammability limit:</b>	Not applicable	
<b>Vapor pressure</b>	Not applicable	
<b>Vapor density</b>	Not applicable	Not applicable
<b>Relative density</b>	1.02 - 1.1	Not applicable
<b>Water solubility</b>	Insoluble in water	Not applicable
<b>Solubility in other solvents</b>	No data available	Not applicable
<b>Partition coefficient</b>	Not applicable	Not applicable
<b>Autoignition temperature</b>	Not applicable	Not applicable
<b>Decomposition temperature</b> > 350	350 °C °C / 662 °F	Not applicable
<b>Kinematic viscosity</b>	Not applicable	Not applicable
<b>Dynamic viscosity</b>	Not applicable	Not applicable
<b><u>Other information</u></b>		
<b>Softening point</b>	No data available	
<b>Molecular weight</b>	No data as a mixture	
<b>VOC Content (%)</b>	negligible	
<b>Liquid Density</b>	No data available	
<b>Bulk density</b>	No data available	

## 10. STABILITY AND REACTIVITY

<b>Reactivity</b>	None under normal use conditions.
<b>Chemical stability</b>	Stable under normal conditions.
<b>Possibility of hazardous reactions</b>	None under normal processing.
<b>Conditions to avoid</b>	Excessive heat. To avoid thermal decomposition, do not overheat.
<b>Incompatible materials</b>	Oxidizing agent. Strong bases.
<b>Hazardous decomposition products</b>	Burning produces obnoxious and toxic fumes. Carbon monoxide. Carbon dioxide (CO <sub>2</sub> ). Aldehydes.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

<b>Inhalation</b>	Specific test data for the substance or mixture is not available.
<b>Eye contact</b>	Specific test data for the substance or mixture is not available.
<b>Skin contact</b>	Specific test data for the substance or mixture is not available.
<b>Ingestion</b>	Specific test data for the substance or mixture is not available.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Symptoms</b>	None known.
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### Numerical measures of toxicity

#### Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document

**Unknown acute toxicity** No information available

**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Styrene (Benzene, ethenyl) 100-42-5	= 1000 mg/kg = 1000 mg/kg ( Rat )	> 2000 mg/kg ( Rat )	= 11.7 mg/L ( Rat ) 4 h

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Skin corrosion/irritation** No information available.

**Serious eye damage/eye irritation** No information available.

**Respiratory or skin sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** Mixture contains ingredients that are potentially carcinogenic.

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

Chemical name	ACGIH	IARC	NTP	OSHA
Styrene (Benzene, ethenyl) 100-42-5	A3	Group 2A	Reasonably Anticipated	X

**IARC (International Agency for Research on Cancer)**

Group 2B - Possibly Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

**Reproductive toxicity** Classification based on data available for ingredients. Contains a known or suspected reproductive toxin. The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as reproductive toxins.

**Genetic toxicity** Mixture contains ingredients that are potential genetic toxicants.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Styrene (Benzene, ethenyl) 100-42-5	0.15 - 3.2: 96 h Pseudokirchneriella subcapitata mg/L EC50 static 0.46 - 4.3: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 0.72: 96 h Pseudokirchneriella subcapitata mg/L EC50 1.4: 72 h Pseudokirchneriella subcapitata mg/L EC50	19.03 - 33.53: 96 h Lepomis macrochirus mg/L LC50 static 3.24 - 4.99: 96 h Pimephales promelas mg/L LC50 flow-through 58.75 - 95.32: 96 h Poecilia reticulata mg/L LC50 static 6.75 - 14.5: 96 h Pimephales promelas mg/L LC50 static	-	3.3 - 7.4: 48 h Daphnia magna mg/L EC50

**Persistence and degradability** No information available.

**Bioaccumulation** No information available.

**Component Information**

Chemical name	Partition coefficient
Styrene (Benzene, ethenyl) 100-42-5	2.95

**Other adverse effects** No information available.

### 13. DISPOSAL CONSIDERATIONS

**Disposal methods**

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

**US EPA Waste Number** U009 U055

**California Hazardous Waste Status** This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste Status
Styrene (Benzene, ethenyl) 100-42-5	Toxic Ignitable

### 14. TRANSPORT INFORMATION

**DOT** Not regulated

**TDG** Not regulated

**MEX** Not regulated

**ICAO (air)** Not regulated

**IATA** Not regulated

**IMDG** Not regulated

**RID** Not regulated

**ADR** Not regulated

**ADN** Not regulated

### 15. REGULATORY INFORMATION

**International Inventories**

**TSCA** Complies  
**DSL/NDSL** Complies

**ENCS** Complies  
**IECSC** Complies  
**KECL** Complies  
**PICCS** Complies  
**AIIC** Complies

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AIIC** - Australian Inventory of Industrial Chemicals

**US Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

**SARA 311/312 Hazard Categories**

**Acute health hazard** Yes  
**Chronic Health Hazard** Yes  
**Fire hazard** No  
**Sudden release of pressure hazard** No  
**Reactive Hazard** No

**CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Styrene (Benzene, ethenyl) 100-42-5	1000 lb	-	-	X

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Styrene (Benzene, ethenyl) 100-42-5	1000 lb	-	RQ 1000 lb final RQ RQ 454 kg final RQ

**US State Regulations**

**California Proposition 65**

This product contains carbon black which is classified as a possible carcinogen when present as respirable dust. This is not relevant for this product since it is not in a respirable form. This product contains the following Proposition 65 chemicals:.

Chemical name	California Proposition 65
Styrene (Benzene, ethenyl) - 100-42-5	Carcinogen
Acrylonitrile - 107-13-1	Carcinogen
Cumene - 98-82-8	Carcinogen
ethylbenzene - 100-41-4	Carcinogen



**U.S. State Right-to-Know Regulations**

**US State Regulations**

Chemical name	New Jersey	Massachusetts	Pennsylvania
Styrene (Benzene, ethenyl) 100-42-5	X	X	X
Acrylonitrile 107-13-1	X	X	X
Cumene 98-82-8	X	X	X
ethylbenzene 100-41-4	X	X	X

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

<b>NFPA</b>	Health hazards 0	Flammability 1	Instability 0	Special hazards -
<b>HMIS</b>	Health hazards 1*	Flammability 1	Physical hazards 0	Personal protection X
Chronic Hazard Star Legend	* = Chronic Health Hazard			

**Revision Date** 12-Feb-2024

**Revision Note** No information available.

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**End of Safety Data Sheet**