

Issuing Date 20-Nov-2015

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Revision Number B

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

### GHS product identifier

**Product Name** P400R™ Break Away Support Material

### Other means of identification

**SSYS Part Number** 400624-0001

**Synonyms** HIPS

### Recommended use of the chemical and restrictions on use

**Recommended Use** Additive manufacturing

**Uses advised against** No information available

### Supplier's details

#### **Supplier Address**

Stratasys Inc  
7665 Commerce Way  
Eden Prairie, MN  
55344  
TEL: 1(952) 937 3000

### Emergency telephone number

**Emergency Telephone Number** 1(952) 937 3000  
+49 722 97772281 - Global - English language response  
+1 978 495 5580 - USA - Multi lingual response

## 2. HAZARDS IDENTIFICATION

### Classification

This chemical is not considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200).

### GHS Label elements, including precautionary statements

#### Emergency Overview

**Signal Word**

None

The product contains no substances which at their given concentration are considered to be hazardous to health

**Appearance** Gray.

**Physical State** Solid (compressed).

**Odor** None.

### Precautionary Statements

**Prevention**

- None

**General Advice**

- None

**Storage**

- None

**Disposal**

- None

**Hazard Not Otherwise Classified (HNOC)**

Not applicable.

**Other information**

100% of the mixture consists of ingredient(s) of unknown toxicity.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Synonyms**

HIPS

Chemical Name	CAS-No	Weight %	Trade secret
Polystyrene	9003-53-6	>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.

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

### 4. FIRST AID MEASURES

**Description of necessary first-aid measures****Eye Contact**

Rinse thoroughly with plenty of water, also under the eyelids. If symptoms persist, call a physician.

**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.

**Inhalation**

Move to fresh air. If symptoms persist, call a physician.

**Ingestion**

Drink plenty of water. Do NOT induce vomiting. If symptoms persist, call a physician.

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

**Most Important Symptoms/Effects** No information available.

**Indication of immediate medical attention and special treatment needed, if necessary****Notes to Physician**

Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**

Water. Dry powder. Foam. Carbon dioxide (CO<sub>2</sub>).

**Unsuitable Extinguishing Media** No information available.

#### **Specific Hazards Arising from the Chemical**

Burning produces obnoxious and toxic fumes. Carbon monoxide. Carbon dioxide (CO<sub>2</sub>). Styrene

#### **Explosion Data**

**Sensitivity to Mechanical Impact**

None.

**Sensitivity to Static Discharge**

None.

#### **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## **6. ACCIDENTAL RELEASE MEASURES**

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

#### **Personal Precautions**

Use personal protective equipment. Ensure adequate ventilation.

### **Environmental Precautions**

#### **Environmental Precautions**

Prevent further leakage or spillage if safe to do so.

### **Methods and materials for containment and cleaning up**

#### **Methods for Containment**

Prevent further leakage or spillage if safe to do so.

#### **Methods for Cleaning Up**

Sweep up and shovel into suitable containers for disposal.

## **7. HANDLING AND STORAGE**

### **Precautions for safe handling**

#### **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.

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

#### **Storage**

Keep tightly closed in a dry and cool place.

#### **Incompatible Products**

Strong oxidizing agents.

## **8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

### **Control parameters**

#### **Exposure Guidelines**

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

### **Appropriate engineering controls**

#### **Engineering Measures**

Showers  
Eyewash stations  
Ventilation systems

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

<b>Eye/Face Protection</b>	Safety glasses with side-shields. For handling molten material, use of a faceshield is recommended.
<b>Skin and Body Protection</b>	When handling hot material, use heat resistant gloves.
<b>Respiratory Protection</b>	No protective equipment is needed under normal use conditions.
<b>Hygiene Measures</b>	Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical State</b>	Solid (compressed).	<b>Appearance</b>	Gray.
<b>Odor</b>	None.	<b>Odor Threshold</b>	No information available.

<u>Property</u>	<u>Values</u>	<u>Remarks/ - Method</u>
<b>pH</b>	No data available	None known
<b>Melting Point/Range</b>	No data available	None known
<b>Boiling Point/Boiling Range</b>	No data available	None known
<b>Flash Point</b>	No data available	None known
<b>Evaporation rate</b>	No data available	None known
<b>Flammability (solid, gas)</b>	No data available	None known
<b>Flammability Limits in Air</b>		
upper flammability limit	No data available	
lower flammability limit	No data available	
<b>Vapor Pressure</b>	No data available	None known
<b>Vapor Density</b>	No data available	None known
<b>Specific Gravity</b>	No data available	None known
<b>Water Solubility</b>	No data available	None known
<b>Solubility in other solvents</b>	No data available	None known
<b>Partition coefficient: n-octanol/water</b>	No data available	None known
<b>Autoignition Temperature</b>	No data available	None known
<b>Decomposition Temperature</b>	No data available	None known
<b>Viscosity</b>	No data available	None known

<b>Flammable Properties</b>	Not flammable
<b>Explosive Properties</b>	No data available
<b>Oxidizing Properties</b>	No data available

### Other information

<b>VOC Content (%)</b>	No data available
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## 10. STABILITY AND REACTIVITY

### Reactivity

No data available.

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

None under normal processing.

### Hazardous Polymerization

Hazardous polymerization does not occur.

**Conditions to avoid**

Incompatible products.

**Incompatible materials**

Strong oxidizing agents.

**Hazardous decomposition products**

Carbon oxides. Aldehydes. Hydrogen cyanide.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure****Product Information**

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

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

**Symptoms** No information available.

**Delayed and immediate effects and also chronic effects from short and long term exposure**

<b>Sensitization</b>	No information available.
<b>Mutagenic Effects</b>	No information available.
<b>Carcinogenicity</b>	The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Polystyrene		Group 3		

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

Group 3 - Not Classifiable as to its Carcinogenicity to Humans

<b>Reproductive Toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Target Organ Effects</b>	Eyes. Skin.
<b>Aspiration Hazard</b>	No information available.

**Numerical measures of toxicity - Product**

**Acute Toxicity** 100% of the mixture consists of ingredient(s) of unknown toxicity.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

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

**Persistence and Degradability** No information available.

**Bioaccumulation** No information available.

**Other Adverse Effects**

No information available.

**13. DISPOSAL CONSIDERATIONS****Waste Disposal Methods** Dispose of in accordance with federal, state, and local regulations**Contaminated Packaging** Do not re-use empty containers.**14. TRANSPORT INFORMATION****DOT** Not regulated**15. REGULATORY INFORMATION****International Inventories**

<b>TSCA</b>	Complies
<b>DSL</b>	Not determined

**Legend****TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List**U.S. Federal Regulations**

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**

<b>Acute Health Hazard</b>	No
<b>Chronic Health Hazard</b>	No
<b>Fire Hazard</b>	No
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	No

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**U.S. State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

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

This product does not contain any substances regulated by state right-to-know regulations.

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION								
<b><u>NFPA</u></b>	Health Hazard	1	Flammability	0	Instability	0	Physical and Chemical Hazards	-
<b><u>HMIS</u></b>	Health Hazard	1	Flammability	0	Physical Hazard	0	Personal Protection	X

Prepared By	Product Stewardship 23 British American Blvd. Latham, NY 12110 1-800-572-6501
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**General Disclaimer**

The information provided on this SDS 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**