

# Material Safety Data Sheet

Material Name: VisiJet® Pearlstone, PS200 Plastic Material

## I. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product/Trade Name: VisiJet® Pearlstone, PS200 Plastic Material

Chemical Family: Organic mixture  
Product Use: For use with the ProJet MP™ 3D Printing System in compliance with the conditions described in this safety data sheet.

### Hazardous Materials Identification System (HMIS):

(Degree of hazard: 0 = low, 4 = extreme):

Health 2  
Flammability 1  
Physical Hazards 1

### Personal Protection:

Skin, eye protection

Manufacturer:



Manufacturer Contact	3D Systems, Inc. 333 3D Systems Circle Rock Hill, South Carolina 29730 U.S.A.
For Information	Toll-free Phone: 800.793.3669
Emergency	800.424.9300 - Chemtrec

## II. COMPOSITION INFORMATION

CAS #	Component	Percent
proprietary	Urethane acrylate oligomers	30-40%
162881-26-7	Phenylbis(2,4,6-trimethylbenzoyl)phosphine oxide	0.1-0.5

### Product Information

This product is considered to be an irritant according to 29CFR 1910.1200 (Hazard Communication Standard).

## III. HAZARDS IDENTIFICATION

### Emergency Overview

This product is irritating to the eyes and skin. Avoid contact with eyes and skin. Inhibitor depletion caused by exposure to heat, radiation or oxidizers can cause spontaneous polymerization generating heat and pressure.

### Potential Health Effects:

Eyes: Can cause irritation consisting of redness, swelling and pain.  
Skin: Can cause irritation or other allergic reactions, including redness and/or swelling.  
Inhalation: Inhalation can cause respiratory irritation.  
Ingestion: Ingestion can cause nausea, diarrhea and/or stomach pain.  
Chronic: Can cause an allergic skin reaction with repeated or prolonged exposure consisting of redness, swelling and/or rash (urticaria).

### Medical Conditions Aggravated by Exposure

Could irritate an existing dermatitis or respiratory condition.

## IV. FIRST AID MEASURES

Skin contact: Immediately flush skin with plenty of soap and water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse.  
Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation persists. Avoid exposure to UV and other light sources.





## IX. PHYSICAL AND CHEMICAL PROPERTIES

Appearance .....	Colorless	Odor .....	Mild
Physical State .....	Soft solid to paste	PH .....	6-7 at 1:1 in Water
Vapor Pressure .....	<2Pa at 20°C	Vapor Density.....	NA
Boiling Point .....	>200°C	Melting/Freezing Point .....	55 °C – 65 °C (131 °F – 149 °F)
Solubility (H <sub>2</sub> O) .....	Insoluble @ 20°C (68 °F)	Specific Gravity .....	1.1
Percent Volatile .....	NA	Molecular Weight .....	NA

## X. CHEMICAL STABILITY AND REACTIVITY

- Chemical Stability: Stable under normal conditions of handling, use and transportation.
- Conditions to Avoid: Avoid exposure to heat, sunlight and UV light.
- Incompatibility: Oxidizing materials, strong acids and strong bases.
- Hazardous Decomposition: Thermal decomposition products can include CO<sub>2</sub>, CO, NO<sub>x</sub>, and smoke.
- Hazardous Polymerization: Can occur, see sections III and V.

## XI. TOXICOLOGICAL INFORMATION

### Acute and Chronic Toxicity

- A: General Product Information: No data available.
- B: Component Analysis

Component	Oral LD <sub>50</sub>	Dermal LD <sub>50</sub>	Inhalation	Irritation	Sensitization
Urethane acrylate oligomers	NA	NA	NA	Irritating to eyes and skin	NA
Phenylbis(2,4,6-trimethylbenzoyl)phosphine oxide	>2000mg/kg (rat)	Not irritant	NA	Not irritant	May cause sensitization by skin contact.

### Carcinogenicity

- A: General Product Information: None.
- B: Component Carcinogenicity: None of this product's components are listed by ACGIH, IARC, OSHA, NIOSH, or NTP

## XII. ECOLOGICAL INFORMATION

### Ecotoxicity

- A: General Product Information: The ecological assessment of this material is based on an evaluation of its components.
- B: Component Analysis - Ecotoxicity - Aquatic Toxicity: No information available.
- Environmental Fate: No information available for product.

## XIII. DISPOSAL CONSIDERATIONS

### Waste Disposal Instructions

Do not contaminate drains, soil or surface waters with the material or its container. Avoid disposal. Attempt to utilize product completely. Dispose of in compliance with all applicable regulations. Prior to disposal of unused material, 3D Systems Inc., recommends consulting and using an approved waste disposal operative to ensure regulatory compliance.



## XIV. TRANSPORT INFORMATION

	US DOT	RID/ADR	IMDG	IATA	IMO	Canada TDG
Shipping Name	Not Regulated					
Hazard Class:						
UN Number:						
Packing Group:						

## XV. REGULATORY INFORMATION

### US FEDERAL

TSCA:.....All materials are listed on the TSCA Inventory or are not subject to TSCA requirements

SARA 302 EHS List (40 CFR 355 Appendix A):...1,4-Benzenediol, CAS: 123-31-9, < 0.2%

SARA 313 (40 CFR 372.65):.....None listed

CERCLA (40 CFR 302.4):.....1,4-Benzenediol, CAS: 123-31-9, < 0.2%

.....2-Propenoic acid, CAS 79-10-7, < 0.004%

### Component Analysis - Inventory

Component/CAS	EEC	CAN	TSCA
Urethane acrylate	NLP	DSL	Yes
Phenylbis(2,4,6-trimethylbenzoyl)phosphine oxide	423-340-5	DSL	Yes

## XVI. ADDITIONAL INFORMATION

MSDS Creation Date:..... December 3, 2012

MSDS Revision #: ..... B

MSDS Revision Date:..... March 11, 2013

Reason for Revision:..... Added PS200

For more information:..... [www.3dsystems.com](http://www.3dsystems.com)

800.793.3669 (Toll-free in the US GMT-07:00; N. America, Mon – Fri, 6:00 a.m. to 6 p.m.)

803.326.3900 (Outside the U.S. GMT-07:00; N. America, Mon – Fri, 6:00 a.m. to 6 p.m.)

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ACGIH = American Conference of Governmental Industrial Hygienists  
CAS = Chemical Abstracts Service  
CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act  
CFR = Code of Federal Regulations  
CPR = Controlled Products Regulations  
DOT = Department of Transportation  
DSL = Domestic Substances List  
EINECS = European Inventory of Existing Commercial Chemical Substances  
EPA = Environmental Protection Agency  
IARC = International Agency for Research on Cancer  
IATA = International Air Transport Association  
IDL = Ingredients Disclosure List

mg/Kg = milligrams per Kilogram  
mg/L = milligrams per Liter  
mg/m<sup>3</sup> = milligrams per Cubic Meter  
MSHA = Mine Safety and Health Administration  
NA = Not Applicable or Not Available  
NIOSH = National Institute for Occupational Safety and Health  
NJTSR = New Jersey Trade Secret Registry  
NTP = National Toxicology Program  
OSHA = Occupational Safety and Health Administration  
SARA = Superfund Amendments and Reauthorization Act  
STEL = Short Term Exposure Limit  
TDG = Transport Dangerous Goods  
TSCA = Toxic Substances Control Act  
WHMIS = Workplace Hazardous Materials Information System.

