

Material Name: VisiJet SR 200 Plastic Material

I. CHEMICAL PRODUCT AND COMPANY IDENTIFICATIONProduct/Trade Name: **VisiJet® SR 200 Plastic Material**

Chemical Family: Organic mixture

Product Use: For use with the InVision™ SR 3D Printer

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 GmbH Guerickeweg 9 Darmstadt, Germany
For Information	Phone: +49 (0) 6151 357-357 Fax: +49 (0) 6151 357-111
Emergency	703.527.3887 - Chemtrec (U.S.)

II. COMPOSITION INFORMATION

EC #	Component	Classification	Percent
203-652-6	Triethylene glycol dimethacrylate ester (CAS# 109-16-0)	Xi, R36/38 R43	45% – 55%
Mixture <i>proprietary</i> <i>proprietary</i>	Urethane acrylate polymer 26% reactive monomer (CAS# <i>proprietary</i>) 74% urethane acrylate polymer (CAS# <i>proprietary</i>)	- N; R36/37/38 R51/53 -	35% – 45%

Component Information/Information on Non-Hazardous Components**General Product Information**

This preparation is classified as hazardous according to European Union Directives 67/548/EEC and 99/45/EC.

III. HAZARDS IDENTIFICATION**Emergency Overview**

This material is an irritant and a sensitizer. Causes eye irritation. Causes skin irritation. Causes respiratory tract irritation. Can cause allergic skin reaction. Hazardous polymerization can occur upon depletion of inhibitor or exposure to heat or UV light.

Substance Preparation Classification

This preparation has been classified for the European Union according to Annex VI Directives 67/548/EEC and 99/45/EC.

Xi; R36/37/38 R43 R52/53

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 causes 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.



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PERSONAL PROTECTIVE EQUIPMENT

- Eyes/Face: Wear chemical goggles or face shield.
- Skin: Use impervious gloves and apron.
- Respiratory: If ventilation cannot effectively keep vapour concentrations below established limits, appropriate certified respiratory protection must be provided.
- General: An eye wash fountain and safety shower are recommended.

IX. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White colored soft solid Blue colored soft solid	Odor	Acrylate
Physical State	Soft solid to paste	PH	NA
Vapour Pressure	NA	Vapour Density	NA
Boiling Point	NA	Melting/Freezing Point	55 °C – 65 °C (131 °F – 149 °F)
Solubility (H ₂ O)	Insoluble @ 20°C (68 °F)	Specific Gravity	1 – 1.05
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 CO₂, CO, NO_x, 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 - LD50/LC50:

Component	Oral LD ₅₀	Dermal LD ₅₀	Inhalation LC ₅₀	Irritation	Sensitization
Triethylene glycol dimethacrylate ester	4.49 mg/Kg (rats)	>2.0 mL/Kg (rabbits)	2 mg/L (rats)	Minimally irritating to eyes and skin (rabbits)	Sensitizer (guinea pigs)
Urethane acrylate resin	No data				

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. This product is toxic to aquatic organisms and could cause long-term adverse effects in the aquatic environment.
- B: Component Analysis - Ecotoxicity - Aquatic Toxicity: The urethane acrylate in this product is toxic to aquatic organisms and could cause long-term adverse effects in the aquatic environment.
- 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, consult 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

European Union Regulatory Information

General Product Information

Xi	Irritant
R36/37/38	Irritating to eyes, respiratory system and skin.
R43	May cause sensitization by skin contact.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S23	Do not breathe fumes/vapour.
S24/25	Avoid contact with skin and eyes.
S61	Avoid release to the environment. Refer to special instructions/safety data sheets.

Contains: Triethylene glycol dimethacrylate ester (CAS# 109-16-0) and a Urethane acrylate polymer.

Component Analysis - Inventory

Component/CAS	EC #	EEC	CAN	TSCA	NLP
Triethylene glycol dimethacrylate ester (CAS# 109-16-0)	203-652-6	EINECS	DSL	Yes	No
Urethane acrylate resin mixture	--	--	--	--	--
<i>Reactive monomer</i>	<i>Polymer</i>	<i>EINECS</i>	<i>DSL</i>	<i>Yes</i>	<i>No</i>
<i>Urethane acrylate polymer</i>	<i>proprietary</i>	<i>EINECS</i>	<i>DSL</i>	<i>Yes</i>	<i>No</i>

XVI. ADDITIONAL INFORMATION

Full text of all Risk Phrases in Sections 2 & 3

Triethylene glycol dimethacrylate ester (CAS# 109-16-0 EC# 203-652-6)

Xi	Irritant
R36/38	Irritating to eyes and skin.
R43	May cause sensitization by skin contact.

Reactive monomer (CAS#/EC# proprietary)

N	Dangerous for the environment
R36/37/38	Irritating to eyes, respiratory system and skin.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Polypropylene Glycol Monomethacrylate (CAS# 39420-45-6)

Xi	Irritant
R36/38	Irritating to eyes and skin.

Product

Xi	Irritant
R36/37/38	Irritating to eyes, respiratory system and skin.
R43	May cause sensitization by skin contact.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.



Safety Data Sheet

Material Name: VisiJet SR 200 Plastic Material

MSDS Creation Date: 13.06.05

MSDS Revision #: 2

MSDS Revision Date: 17.04.06

Reason for Revision: Change of Logo and component disclosure.

For more information: www.3dsystems.com

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Key/Legend

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/m³ = 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.

