

Issuing Date 05-Jan-2017

Revision date 23-Feb-2023

Revision Number 1

**1. Identification****Product identifier**

Product Name VisiJet® M2R-CL

**Other means of identification**

Product Code(s) 24218

UN number or ID number 3082

Synonyms None

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

Recommended use For use with ProJet® 2500 Systems

Restrictions on use Any non-intended use

**Details of the supplier of the safety data sheet****Manufacturer Address**3D Systems, Inc.  
333 Three D Systems Circle  
Rock Hill, South Carolina 29730 U.S.A.

E-mail moreinfo@3dsystems.com

**Emergency telephone number**

Company Phone Number 800.793.3669 (Toll-free)

Emergency Telephone Chemtrec - 800.424.9300 (Toll Free)  
+1 703-527-3887**2. Hazard(s) identification****Classification**

Acute toxicity - Inhalation (Vapors)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Skin sensitization	Category 1
Reproductive toxicity	Category 1B
Chronic aquatic toxicity	Category 2

**Hazards not otherwise classified (HNOC)**

Not applicable

**Label elements**


**Danger**
**Hazard statements**

Causes skin irritation  
 Causes serious eye irritation  
 May cause an allergic skin reaction  
 Harmful if inhaled  
 May damage fertility or the unborn child  
 Toxic to aquatic life with long lasting effects

**Precautionary Statements - Prevention**

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Wash face, hands and any exposed skin thoroughly after handling  
 Use only outdoors or in a well-ventilated area  
 Contaminated work clothing must not be allowed out of the workplace  
 Wear protective gloves/clothing and eye/face protection  
 Avoid release to the environment

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention  
 Specific treatment: Wash contaminated skin with soap and water. Wash eyes with clean water for about 15 minutes.  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 If eye irritation persists: Get medical advice/attention  
 IF ON SKIN: Wash with plenty of water and soap  
 Take off contaminated clothing and wash it before reuse  
 If skin irritation or rash occurs: Get medical advice/attention  
 IF INHALED: Remove person to fresh air and keep comfortable for breathing

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

**Other information**

Store out of direct sunlight, UV light sources or heat. Use with local exhaust ventilation. May be harmful if inhaled.

### 3. Composition/information on ingredients

**Substance**

Not applicable.

**Mixture**

Chemical name	CAS No	Weight-%
2-[[[butylamino)carbonyl]oxy]ethyl acrylate	63225-53-6	30 - 40

2-Propenoic acid, 2-methyl-, (1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl ester, rel-	7534-94-3	15 - 25
Octahydro-4, 7-methano-1 H-indene diyl)bis(methylene) diacrylate	42594-17-2	10 - 20
Diphenyl (2,4,6-trimethylbenzoyl) phosphine oxide	75980-60-8	0.5 - 1.5
Nonhazardous Components	NA	10 - 20

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

## 4. First-aid measures

### Description of first aid measures

<b>General advice</b>	Show this safety data sheet to the doctor in attendance.
<b>Inhalation</b>	Remove to fresh air. Get medical attention immediately if symptoms occur.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.
<b>Skin contact</b>	May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician. Wash off immediately with soap and plenty of water for at least 15 minutes.
<b>Ingestion</b>	Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician.
<b>Self-protection of the first aider</b>	Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

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

**Symptoms** Itching. Rashes. Hives. May cause redness and tearing of the eyes. Burning sensation.

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

**Note to physicians** May cause sensitization in susceptible persons. Treat symptomatically.

## 5. Fire-fighting measures

<b>Suitable Extinguishing Media</b> Large Fire	Dry chemical, CO2 or water spray. CAUTION: Use of water spray when fighting fire may be inefficient.
<b>Unsuitable extinguishing media</b>	Do not scatter spilled material with high pressure water streams.
<b>Specific hazards arising from the chemical</b>	Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). May cause sensitization by skin contact. Product is or contains a sensitizer. May cause sensitization by skin contact.
<b>Hazardous combustion products</b>	Hydrocarbons. Carbon dioxide (CO2). Carbon monoxide. Nitrogen oxides (NOx).
<b>Explosion data</b>	
<b>Sensitivity to mechanical impact</b>	No information available.
<b>Sensitivity to static discharge</b>	No information available.

**Special protective equipment and precautions for fire-fighters** Remove all sources of ignition. Wear self contained breathing apparatus for fire fighting if necessary.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

**Other information** Refer to protective measures listed in Sections 7 and 8.

### Methods and material for containment and cleaning up

**Methods for containment** Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.

**Methods for cleaning up** Use of certified respirators and chemical resistant gloves are required to avoid exposure to any unreacted materials during spill clean-up (use of a 3M 6000 respirator with organic vapor cartridge A2 or half mask 3M 4251 is recommended). Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

## 7. Handling and storage

### Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Remove contaminated clothing and shoes.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Store in a cool, dry area away from potential sources of heat, open flames, sunlight or other chemicals. Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up.

## 8. Exposure controls/personal protection

### Control parameters

**Exposure Limits** Not established.

### Appropriate engineering controls

**Engineering controls** Recommend users establish appropriate engineering control measures, including but not

limited to local exhaust ventilation, in rooms/areas where printers are installed and in post-processing areas, to minimize inhalation exposure.

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

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Hand protection** Wear suitable gloves. Impervious gloves.

Gloves			
Duration of contact	PPE - Glove material	Glove thickness	Break through time
-	Nitrile rubber	8 mm	

**Skin and body protection** Wear suitable protective clothing. Long sleeved clothing.

**Respiratory protection** Ensure adequate ventilation. Use of a dust mask is recommended during cleaning surfaces with dust or when dust generation is a possibility during sanding or grinding operations.

**Environmental exposure controls** Do not allow to enter into soil/subsoil. Avoid release to the environment.

**General hygiene considerations** Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing.

**Thermal hazards** None under normal processing.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

<b>Physical state</b>	Liquid
<b>Appearance</b>	Viscous
<b>Color</b>	clear
<b>Odor</b>	Mild Acrylic
<b>Odor threshold</b>	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	-
Melting point / freezing point	No data available	-
Boiling point / boiling range	No data available	-
Flash point	142 °C	Cleveland Open Cup
Evaporation rate	No data available	-
Flammability (solid, gas)	No data available	-
Flammability Limit in Air		-
Upper flammability or explosive limits	-	
Lower flammability or explosive limits	-	
Vapor pressure	No data available	-
Relative vapor density	No data available	-
Relative density	1.1g/cm <sup>3</sup>	-
Water solubility	Insoluble in water	-
Solubility(ies)	No data available	-
Partition coefficient	No data available	-
Autoignition temperature	No data available	-
Decomposition temperature		-
Kinematic viscosity	No data available	-
Dynamic viscosity	10 - 13 (@80 °C)	-

### Other information

<b>Explosive properties</b>	No information available
<b>Oxidizing properties</b>	No information available
<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC content</b>	No information available
<b>Liquid Density</b>	No information available
<b>Bulk density</b>	No information available

**10. Stability and reactivity**

<b>Reactivity</b>	Stable under normal conditions.
<b>Chemical stability</b>	Stable under normal conditions.
<b>Possibility of hazardous reactions</b>	None under normal processing.
<b>Hazardous polymerization</b>	None under normal processing.
<b>Conditions to avoid</b>	Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).
<b>Incompatible materials</b>	Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Strong acids. Strong bases. Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Thermal decomposition can lead to release of irritating and toxic gases and vapors. Nitrogen oxides (NOx). Carbon dioxide (CO2). Carbon monoxide. Hydrocarbons.

**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. May cause irritation of respiratory tract. May be harmful if inhaled.
<b>Eye contact</b>	Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.
<b>Skin contact</b>	May cause sensitization by skin contact. Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). Causes skin irritation.
<b>Ingestion</b>	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms** Itching. Rashes. Hives. Redness. May cause redness and tearing of the eyes.

Acute toxicity

**Numerical measures of toxicity**  
No information available

**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
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2-[[[(butylamino)carbonyl]oxy]ethyl acrylate 63225-53-6	-	-	0.5 - 1 mg/L ( Rat ) 4 h
Octahydro-4, 7-methano-1 H-indene diyl)bis(methylene) diacrylate 42594-17-2	-	> 2000 mg/kg ( Rat )	-
Diphenyl (2,4,6-trimethylbenzoyl) phosphine oxide 75980-60-8	-	> 2000 mg/kg ( Rat )	-

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

<b>Skin corrosion/irritation</b>	Classification based on data available for ingredients. Causes skin irritation.
<b>Serious eye damage/eye irritation</b>	Classification based on data available for ingredients. Causes serious eye irritation.
<b>Respiratory or skin sensitization</b>	May cause an allergic skin reaction.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	No information available.
<b>Reproductive toxicity</b>	Contains a known or suspected reproductive toxin. Classification based on data available for ingredients. May damage fertility or the unborn child.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Aspiration hazard</b>	No information available.
<b>Other adverse effects</b>	No information available.
<b>Interactive effects</b>	No information available.

**12. Ecological information**

**Ecotoxicity** Toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
2-Propenoic acid, 2-methyl-, (1R,2R,4R)-1,7,7-trimethyl bicyclo[2.2.1]hept-2-yl ester, rel-	-	LC50: =1.79mg/L (96h, Danio rerio)	-	-

7534-94-3			
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**Persistence and degradability** No information available.

**Bioaccumulation** No information available.

**Component Information**

Chemical name	Partition coefficient
2-Propenoic acid, 2-methyl-, (1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl ester, rel- 7534-94-3	5.09
Octahydro-4, 7-methano-1 H-indene diyl)bis(methylene) diacrylate 42594-17-2	4.54 - 4.64
Diphenyl (2,4,6-trimethylbenzoyl) phosphine oxide 75980-60-8	3.1

**Other adverse effects** No information available.

**13. Disposal considerations**

**Waste treatment methods**

**Waste from residues/unused products** Reduce waste by attempting to utilize product completely. Dispose of contents and container in accordance with local, regional, national, and international regulations as applicable.

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

**14. Transport information**

**DOT** Regulated  
**UN number or ID number** 3082  
**Proper shipping name** Environmentally hazardous substance, liquid, n.o.s. Acrylic Polymer (Other)  
**Transport hazard class(es)** 9  
**Packing group** III  
**Special Provisions** 49 CFR § 171.4(c)(2)  
**DOT Marine Pollutant** P  
**Marine pollutant** Acrylates

**TDG** Regulated  
**UN number or ID number** 3082  
**UN proper shipping name** Environmentally hazardous substance, liquid, n.o.s. Acrylic Polymer (Other)  
**Transport hazard class(es)** 9  
**Packing group** III

**IATA** Regulated  
**UN number or ID number** 3082  
**UN proper shipping name** Environmentally hazardous substance, liquid, n.o.s. Acrylic Polymer (Other)  
**Transport hazard class(es)** 9  
**Packing group** III



<b>Technical Name</b>	Acrylates
<b>Special Provisions</b>	A197
<b>IMDG</b>	Regulated
UN number or ID number	3082
UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. Acrylic Polymer (Other)
Transport hazard class(es)	9
Packing group	III
EmS-No	F-A, S-A
Special Provisions	2.10.2.7
Marine pollutant	P
<b>RID</b>	Regulated
UN number or ID number	3082
Transport hazard class(es)	9
Packing group	III
<b>ADR</b>	Regulated
UN number or ID number	3082
UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. Acrylic Polymer (Other)
Transport hazard class(es)	9
Packing group	III
Special Provisions	49 CFR § 171.4(c)(2)

## 15. Regulatory information

### International Inventories

**TSCA** All ingredients are listed (Active) or exempt.

### **U.S. - TSCA (Toxic Substances Control Act) - Section 5(a)(2) - Chemicals with Significant New Use Rules (SNURs)**

None

TSCA Section 12(b) Export notification: None

**TSCA Section 6 restricted substances** This formulation DO NOT contain substances listed under the EPA Regulation of Persistent, Bioaccumulative, and Toxic Chemicals Under TSCA Section 6(h).

<b>DSL/NDSL</b>	All ingredients are listed or exempt.
<b>EINECS/ELINCS</b>	All ingredients are listed or exempt.
<b>ENCS</b>	All ingredients are listed or exempt.
<b>IECSC</b>	All ingredients are listed or exempt.
<b>KECL</b>	All ingredients are listed or exempt.
<b>AICS</b>	All ingredients are listed or exempt.
<b>TCSI</b>	All ingredients are listed or exempt.
<b>NZIoC</b>	All ingredients are listed or exempt.

### **Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**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

**AICS** - Australian Inventory of Chemical Substances

**NZIoC** - New Zealand Inventory of Chemical Substances

**US Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or 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**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

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

**US State Regulations**

**California Proposition 65**

This product contains the following Proposition 65 chemicals:



**WARNING** This product can expose you to chemicals including those listed below, which is [are] known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Chemical name	California Proposition 65
Toluene - 108-88-3	Developmental

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

Chemical name	New Jersey	Massachusetts	Pennsylvania
Toluene 108-88-3	X	X	X
Butylated hydroxytoluene 128-37-0	X	X	X

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

**16. Other information**

<b>NFPA</b>	<b>Health hazards</b> 2	<b>Flammability</b> 0	<b>Instability</b> 0	<b>Special hazards</b> -
<b>HMIS</b>	<b>Health hazards</b> 2 *	<b>Flammability</b> 0	<b>Physical hazards</b> 0	<b>Personal protection</b> X
<i>Chronic Hazard Star Legend</i>	<i>* = Chronic Health Hazard</i>			

**Key or legend to abbreviations and acronyms used in the safety data sheet**

**Legend Section 8: Exposure controls/personal protection**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
U.S. Environmental Protection Agency ChemView Database  
European Food Safety Authority (EFSA)  
EPA (Environmental Protection Agency)  
Acute Exposure Guideline Level(s) (AEGL(s))  
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
U.S. Environmental Protection Agency High Production Volume Chemicals  
Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
National Institute of Technology and Evaluation (NITE)  
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

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**Disclaimer**

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**End of Safety Data Sheet**