

## \*\*\*SAFETY DATA SHEET\*\*\*

### 1. Identification

<b>Product Name</b>	ESD - RIGID (B9R-ESD-RIGID)
<b>Recommended Use</b>	Additive Manufacturing
<b>Uses Advised Against</b>	
<b>Supplier Information</b>	MECHnano, LLC 3850 E. Baseline Rd. Suite 126 Mesa, AZ 85206 Tel: (+1) 480-648-9919
<b>Emergency Telephone Number</b>	(+1) 480-648-8950

### 2. Hazard(s) Identification

**Classification**
**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

This substance is not considered hazardous

**GHS Label elements**
**Pictogram**

**Signal Word**
**Warning**

This product contains nanoparticles. Nanoparticles are particles which have at least one dimension <100 nanometers. Nanoparticles may or may not exhibit size-related properties that differ significantly from the properties of the bulk material. These size-related properties may affect absorption, inhalation, and toxicity of the material in animals, humans, and aquatic life.

**Hazard Statements**

- H317 May cause an allergic skin reaction
- H319 Causes serious eye irritation
- H411 Toxic to aquatic life with long lasting effects

**Precautionary Statements – Prevention**

- P202 Do not handle until all safety precautions have been read and understood
- P262 Do not get in eyes, on skin, or on clothing
- P280 Wear protective gloves, protective clothing, eye protection
- P273 Avoid release to the environment
- P264 Wash skin thoroughly after handling

**Precautionary Statements – Response**

- P303 | P350 IF ON SKIN: gently wash with plenty of soap and water
- P305 | P351 | P338 IF IN EYES: Rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- P306 IF ON CLOTHING: wash contaminated clothing before reuse

**Precautionary Statements – Storage**

- P403 Store in a dry place
- P410 Protect from sunlight

**Precautionary Statements – Disposal**

- P501 Dispose of contents/container to an approved waste disposal plant in accordance with local/regional regulations.

**Hazards not otherwise classified (HNOC)**

none

### 3. Composition | Information on Ingredients

Chemical Name	CAS - No	Weight %	Trade Secret	Hazard
MECH <sup>1</sup>	--	--	*	Not hazardous
Multifunctional Methacrylate	--	40-60	*	Not hazardous
Polyether Urethane Methacrylate	--	10-30	*	Not hazardous
Methacrylate Monomer(s)	*	15-45	*	Skin Irritant, Eye Irritant, Skin Sens.; H315, H319, H317
Photoinitiator(s)	*	<1%	*	Repr. 2; H361 Aquatic Chronic 2; H411

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

### 4. First Aid Measures

#### Description of first aid measures

<b>General Notes</b>	Show this Safety Data Sheet to the doctor in attendance.
<b>Eye contact</b>	Flush eyes with water for at least 15 minutes. Get medical attention if eye irritation develops or persists.
<b>Skin Contact</b>	Immediately flush skin with plenty of soap and water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse.
<b>Inhalation</b>	Move to fresh air, if symptoms persist, call a physician.
<b>Ingestion</b>	If swallowed, rinse mouth, Get medical attention. DO NOT induce vomiting.
<b>Most important symptoms and effects, both acute and delayed</b>	No information available
<b>Indication of any immediate medical attention and special treatment needed</b>	
<b>Note to physicians</b>	Treat symptomatically

### 5. Fire-Fighting Measures

<b>Extinguishing media</b>	
<b>Suitable extinguishing media</b>	Use CO <sub>2</sub> , dry chemical, or foam
<b>Unsuitable extinguishing media</b>	Do not use a solid water stream as it may scatter and spread fire
<b>Special hazards arising from the substance or mixture</b>	Carbon dioxide (CO <sub>2</sub> ), carbon monoxide (CO), oxides of nitrogen (NO <sub>x</sub> ), dense black smoke.
<b>Explosion data</b>	
<b>Sensitivity to Mechanical Impact</b>	None
<b>Sensitivity to Static Discharge</b>	None
<b>Special protective equipment for fire-fighters</b>	
	Wear full protective clothing, including helmet, self-contained positive-pressure or pressure demand breathing apparatus, protective clothing, and facemask.

### 6. Accidental Release Measures

<b>Personal precautions, protective equipment, and emergency procedures</b>	Ensure adequate ventilation, Wear protective gloves/clothing and eye/face protection
<b>Environmental precautions</b>	Do not allow material to contaminate ground water system; try to prevent the material from entering drains or water courses, See Section 12 for additional Ecological Information, local authorities should be advised if significant spillages cannot be contained.
<b>Methods and material for containment and cleaning up</b>	Soak up spill with inert absorbent material. Use personal protective equipment. Place used absorbent into suitable, covered, labeled waste disposal container.

Reference to other sections  
See section 13 for disposal

## 7. Handling and Storage

### Precautions for safe handling

- Handling**
- Handle in accordance with good industrial hygiene and safety practices
  - Provide adequate ventilation
  - Use suitable protective equipment
  - Protect from light
  - Avoid contact with skin and eyes
  - Do not allow to enter drains or watercourses

### Conditions for safe storage, including any incompatibilities

- Storage**
- Store sealed in the original container at room temperature
  - Keep indoors in a cool, dry, well-ventilated place
  - Store out of direct sunlight or UV light sources
  - Extended storage temperature not exceeding 32°C | 90°F

## 8. Exposure Controls | Personal Protection

### Control Parameters

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

### Appropriate engineering controls

- Showers
- Eyewash stations
- Ventilation systems

### Individual protection measures (personal protective equipment)

- |               |   |
|---------------|---|
| Eye   Face    | Safety glasses with side-shields          |
| Skin and Body | Protective gloves and protective clothing |
| Respiratory   | None under normal use conditions          |

### Hygiene Measures

When using, do not eat, drink, or smoke. Wash hands after handling and before eating, smoking, and using the lavatory and at the end of the day. Regular cleaning of equipment, work area and clothing is recommended.

## 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

<b>Physical state</b>	Liquid
<b>Appearance</b>	Opaque
<b>Color</b>	Black
<b>Odor</b>	Characteristic
<b>Odor threshold</b>	No information available

Property	Value	Remarks   Method
<b>pH</b>		No information available
<b>Melting Point   Freezing Point</b>		No information available
<b>Boiling Point   Boiling Range</b>	>100°C	No information available
<b>Flash Point</b>	>94°C   >201°F	
<b>Evaporation rate</b>		No information available
<b>Flammability (solid, gas)</b>		No information available
<b>Flammability Limits in Air</b>		No information available
<b>upper flammability limit</b>	--	
<b>lower flammability limit</b>	--	
<b>Vapor Pressure</b>		No information available
<b>Vapor Density</b>		No information available
<b>Specific Gravity</b>	~ 1.1 g/cm <sup>3</sup>	
<b>Water Solubility</b>	Practically insoluble	
<b>Solubility in other solvents</b>		No information available



Partition coefficient: n-octanol/water		No information available
Autoignition Temperature		No information available
Decomposition Temperature		No information available
Viscosity	878.1 cPs @25°C	No information available
Flammable Properties	Not flammable	
Explosive Properties		No information available
Oxidizing Properties		No information available
Other information		
Softening point		No information available
Molecular weight		No information available
VOC Content (%)		No information available
Density		No information available
Bulk Density		No information available

## 10. Stability and Reactivity

Reactivity	Does not react under normal conditions of use and storage
Chemical Stability	Stable under recommended handling and storage conditions
Possibility of Hazardous Reactions	None under normal processing
Conditions to Avoid	Protect from light and heat. Avoid storing
Incompatible Materials	Amines, Strong oxidizing agents, Strong acids, Strong bases, Oxygen scavengers
Hazardous Decomposition Products	No decomposition if stored and applied as directed

## 11. Toxicological Information

### Information on toxicological effects

#### Acute Toxicity

**Product Data:** Based on available data, the classification criteria are not met.

#### Component Data:

Component Name	Route	Result
Photoinitiator(s)	Oral	LD50 >5,000 mg/kg (rat)
	Dermal	LD50 >2,000 mg/kg (rat) (OECD 402)

#### Likely routes of exposure

Inhalation	No information available
Eye contact	May cause eye irritation
Skin Contact	May cause an allergic skin reaction
Ingestion	No information available
Symptoms	No information available
Delayed and immediate effects as well as chronic effects from short and long-term exposure	
Sensitization	No information available
Mutagenic effects	No information available
Reproductive toxicity	Suspected of damaging fertility or the unborn child (photoinitiator(s))
Carcinogenicity	Classification criteria are not met
Aspiration hazard	No information available
Other adverse effects	No information available

## 12. Ecological Information

Acute aquatic toxicity	
Product Information	No information available
Persistence and degradability	
Photoinitiator(s)	This substance is not readily biodegradable.
Bioaccumulation	
Photoinitiator(s)	A significant bioaccumulation is not expected.
Mobility in soil	
Photoinitiator(s)	Low potential for adsorption



## 13. Disposal Considerations

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### Waste Treatment Methods

### Waste Disposal Methods

The material, as supplied is not a hazardous waste according to Federal regulations (40 CFR 261)

### Contaminated packaging

Dispose of in accordance with local regulations

## 14. Transport Information

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<b>UN Number</b>	UN3082
<b>UN Proper Shipping Name</b>	Environmentally hazardous liquid, N.O.S. Methacrylate Polymer
<b>UN transport hazard class(es)</b>	9
<b>Packing group</b>	III
<b>Environmental hazards</b>	Marine Pollutant
<b>Special Precautions for User</b>	None
<b>Land Transport (DOT)</b>	DOT: 49 CFR 171.4(c)(2); Not regulated as dangerous goods when transported in single or inner packaging of 5 L or less for liquids or net mass of 5 Kg or less for solids provided the packaging meets the requirements of 49 CFR 173.24(a)
<b>Air Transport (ICAO-IATA)</b>	This product is not regulated as a dangerous good when transported in sizes of ≤5L or 5≤ kg provided the packaging meets the general provisions of 5.0.2.4.1, 5.0.2.6.1 and 5.0.2.8.
<b>Sea Transport (IMDG-IMO)</b>	Not regulated

## 15. Regulatory Information

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### International Inventories

**TSCA** Complies

**DSL | NDSL** Complies

### US Federal Regulations

**OSHA** This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

**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

**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.

### US 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 under applicable state right-to-know regulations

## 16. Other Information

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<b>Prepared By</b>	Mechnano, LLC
<b>Revision Date</b>	2021-04-19
<b>Revision Notes</b>	Not applicable
<b>Disclaimer</b>	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.

