



Revision Note: US-EN-v1
Prepared By: Nexa3D, Inc.
Product: xESD

1. Identification

Product Name

xESD

Recommended use: Additive Manufacturing
Uses Advised Against:

Supplier Information

Company:

Nexa3D, Inc.
1923 Eastman Ave STE 200
Ventura, CA 93003, USA

Telephone: +1 805-465-9001
E-mail address: info@nexa3d.com

Emergency telephone number

ChemTel 1-800-255-3924 (USA), 1-813-248-0585 (international), Contract MIS3892732

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.



Revision Note: US-EN-v1
 Prepared By: Nexa3D, Inc.
 Product: xESD

Hazard Statement:

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 ^t	--	--	*	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



Revision Note: US-EN-v1
Prepared By: Nexa3D, Inc.
Product: xESD

4. First-Aid Measures

Description of first aid measures

General Notes:

Show this Safety Data Sheet to the doctor in attendance.

Eye Contact:

Flush eyes with water for at least 15 minutes. Get medical attention if eye irritation develops or persists.

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.

Inhalation:

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

Ingestions:

If swallowed, rinse mouth, Get medical attention. DO NOT induce vomiting.

Most important symptoms and effects, both acute and delayed

No information available

Indication of any immediate medical attention and special treatment needed

Note to physicians: Treat symptomatically.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:

Use CO₂, dry chemical, or foam

Unsuitable extinguishing media:

Do not use a solid water stream as it may scatter and spread fire

Special hazards arising from the substance or mixture

Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke.

Explosion data

Sensitivity to Mechanical Impact: None

Sensitivity to Static Discharge: None

Special protective equipment for fire-fighters:

Wear full protective clothing, including helmet, self-contained positive-pressure or pressure demand breathing apparatus, protective clothing, and facemask.



Revision Note: US-EN-v1
Prepared By: Nexa3D, Inc.
Product: xESD

Personal precautions, protective equipment, and emergency procedures:

Ensure adequate ventilation, Wear protective gloves/clothing and eye/face protection.

Environmental precautions:

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.

Methods and material for containment and cleaning up:

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



Revision Note: US-EN-v1
Prepared By: Nexa3D, Inc.
Product: xESD

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

Physical state:	liquid
Appearance:	Opaque
Color:	Black
Odor:	Characteristic
Odor threshold:	No information available



Revision Note: US-EN-v1
 Prepared By: Nexa3D, Inc.
 Product: xESD

Property	Value	Remarks Method
pH		No information available
Melting Point Freezing Point		No information available
Boiling Point Boiling Range	>100°C	No information available
Flash Point	>94°C >201°F	
Evaporation Rate		No information available
Flammability (Solid, Gas)		No information available
Flammability Limits in Air		No information available
Upper Flammability Limit	--	
Lower Flammability Limit	--	
Vapor Pressure		No information available
Vapor Density		No information available
Specific Gravity	~ 1.1 g/cm ³	
Water Solubility	Practically insoluble	
Solubility in Other Solvents		No information available
Partition Coefficient: Noctanol/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	



Revision Note: US-EN-v1
 Prepared By: Nexa3D, Inc.
 Product: xESD

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 above 38 degrees Celsius.

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
	Dermal	LD50 >2,000

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



Revision Note: US-EN-v1
 Prepared By: Nexa3D, Inc.
 Product: xESD

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

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

UN Number	UN3082
UN Proper Shipping Name	Environmentally hazardous liquid, N.O.S. Methacrylate Polymer
UN transport hazard class(es)	9
Packing group	III
Environmental hazards	Marine Pollutant
Special Precautions for User	None
Land Transport (DOT)	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)
Air Transport (ICAO-IATA)	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.
Sea Transport (IMDG-IMO)	Not regulated.



Revision Note: US-EN-v1
 Prepared By: Nexa3D, Inc.
 Product: xESD

15. Regulatory Information

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

Prepared By MECHnano, LLC
Revision Date 04-19-2021
Revision Notes Not applicable
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.