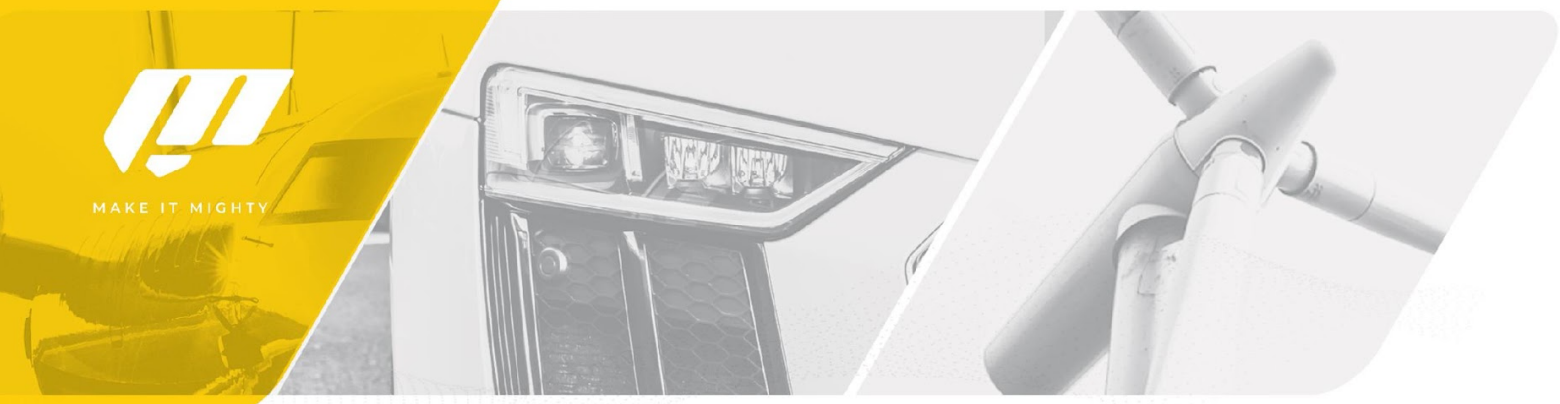


SAFETY DATA SHEET

1. Identification

Product Name: MITO RES-1 LAMINATING EPOXY RESIN
(Laminating epoxy resin with 1%wt. modified graphene oxide)

Product Use: Compression molding applications for high performance sporting goods.

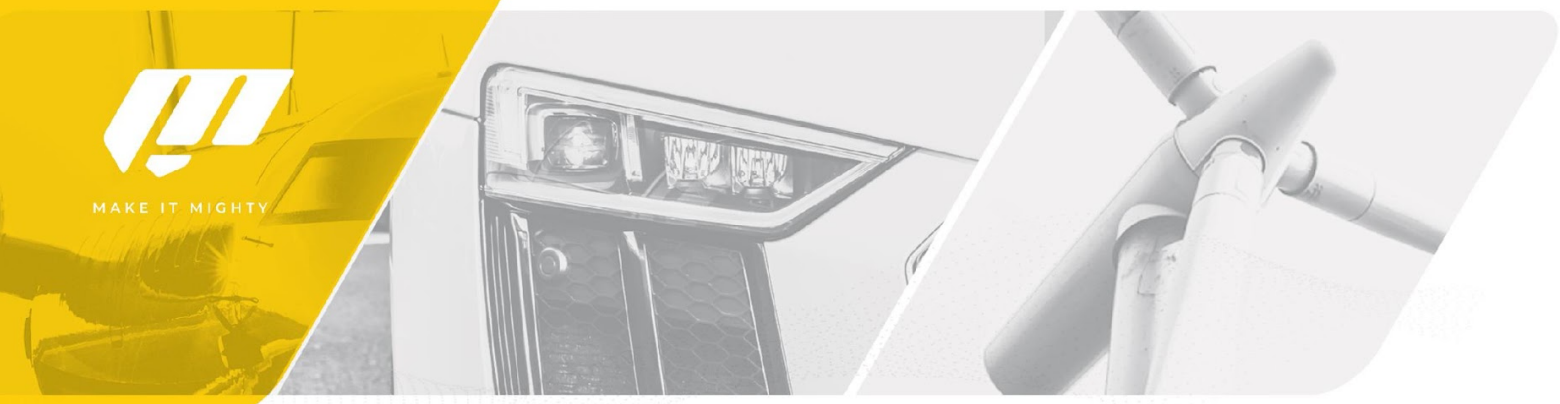
Manufacturer: **MITO Material Solutions, Inc.**
8902 Vincennes Circle, Suite B
Indianapolis, IN, 46268
US

Telephone: 855-344-6486

Email: info@mitomaterials.com

Emergency Telephone:

US and Canada: 800-424-9300
24 Hours/day; 7 Days/week



2. Hazards Identification

Physical hazards Not classified.

Health hazards

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Sensitization, skin	Category 1
Carcinogenicity	Category 1A

Environmental hazards

Hazardous to the aquatic environment, long-term hazard	Category 2

OSHA defined hazards Not classified.

Label elements

Signal word Danger

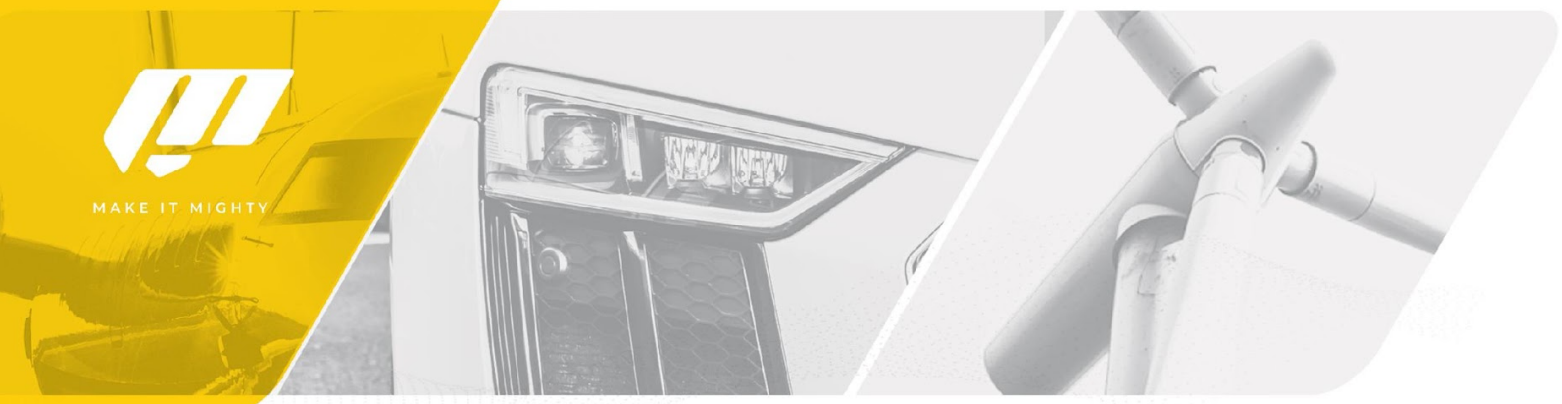
Hazard statement Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause cancer. Toxic to aquatic life with long lasting effects.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Response Take off contaminated clothing and wash it before reuse. Collect spillage.

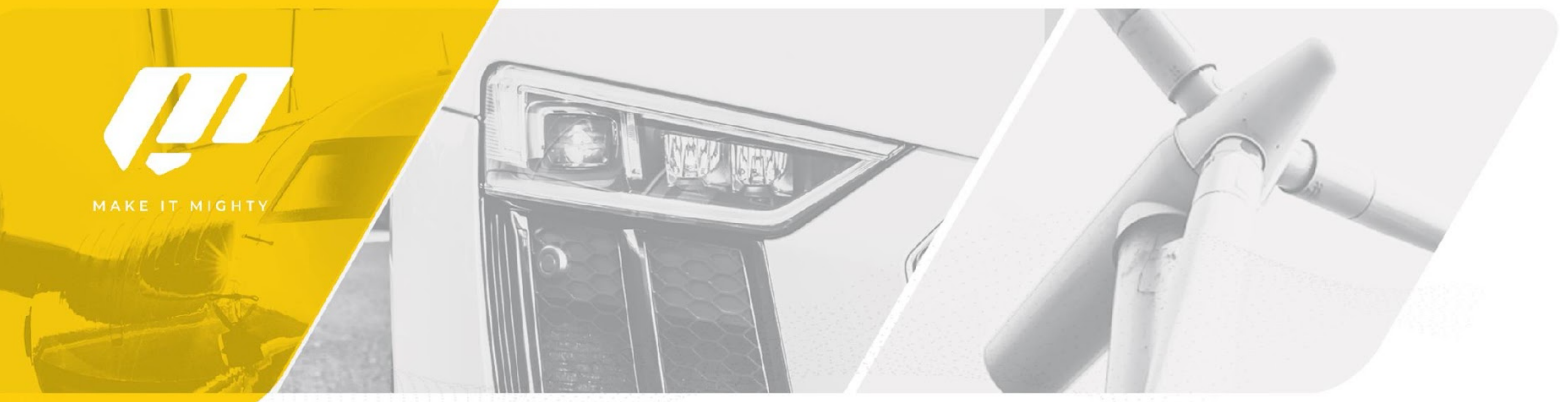
If on skin: Wash with plenty of water.



	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention.
Storage	Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	99.01% of the mixture consists of component(s) of unknown acute oral toxicity. 99.01% of the mixture consists of component(s) of unknown acute dermal toxicity. 99.01% of the mixture consists of component(s) of unknown acute inhalation toxicity. 99.01% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment.

3. Composition and chemical ingredients

Chemical Identity	CAS #	Concentration
Epoxy resin	25068-38-6	90-99%
Modified Graphene Oxide	n/a	<1%

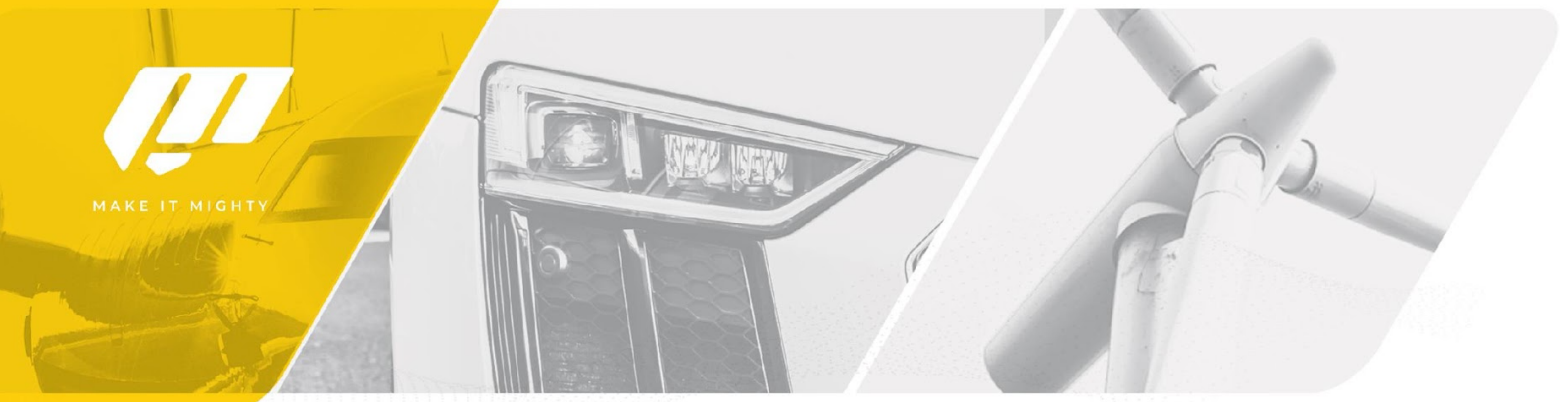


4. First aid measures

Eye contact	Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Remove any contact lenses. Seek medical attention.
Ingestion	Rinse mouth. Do not induce vomiting. Seek immediate medical attention.
Skin contact	Remove contaminated clothing immediately and wash with running water and non-abrasive soap. If irritation persists, seek medical attention.
Inhalation	Allow the victim to rest in a well-ventilated area. Seek immediate medical attention.
Most important symptoms/effects, acute and delayed	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	If exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

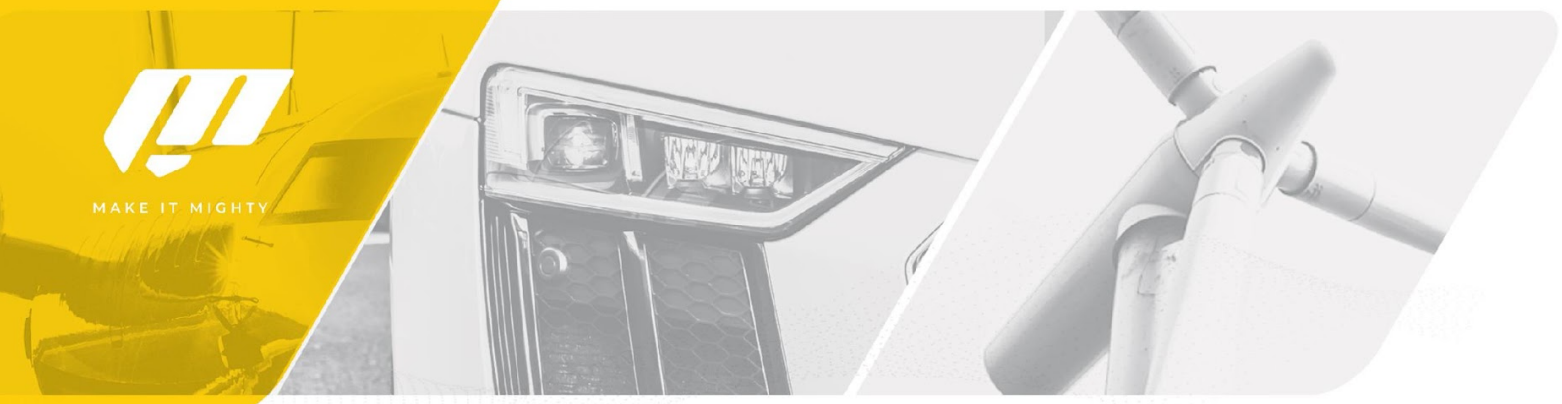
Fire hazards	May catch fire if exposed to open flames and sparks of heat.
Other combustion hazards	In the event of combustion or thermal decomposition, this material may release carbon monoxide (CO) or carbon dioxide (CO_2) or oxides of Silicon and Nitrogen. At temperatures over 300 ^{0}C, this material may react with potassium, sodium, rubidium, or cesium to create intercalation compounds that may ignite and may react explosively with water.



Suitable extinguishing media	Use water spray, carbon dioxide, dry chemical powder, or appropriate foam.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Special protective equipment and precaution for fire fighters	Firefighters exposed to vapors should wear a self-contained breathing apparatus and full protective clothing to prevent contact with skin and eyes.
Firefighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment, and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Exercise appropriate precautions to minimize direct contact with skin or eyes. Wear appropriate protective equipment and clothing. Avoid breathing mist/vapors. Do not touch damages containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protect, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Do not let product enter drains. Large spills: Stop the flow of material if this is without risk. Dike the spilled where possible. Absorb in vermiculite, dry sand, or earth and place into containers. Following product recovery, flush area with water. Small spills: Wipe up with absorbent material. Clean surface thoroughly to remove residual contamination. Never return spills to original container for re-use. Put material in suitable, covered, labeled containers. For waste disposal see section 13 of the SDS.



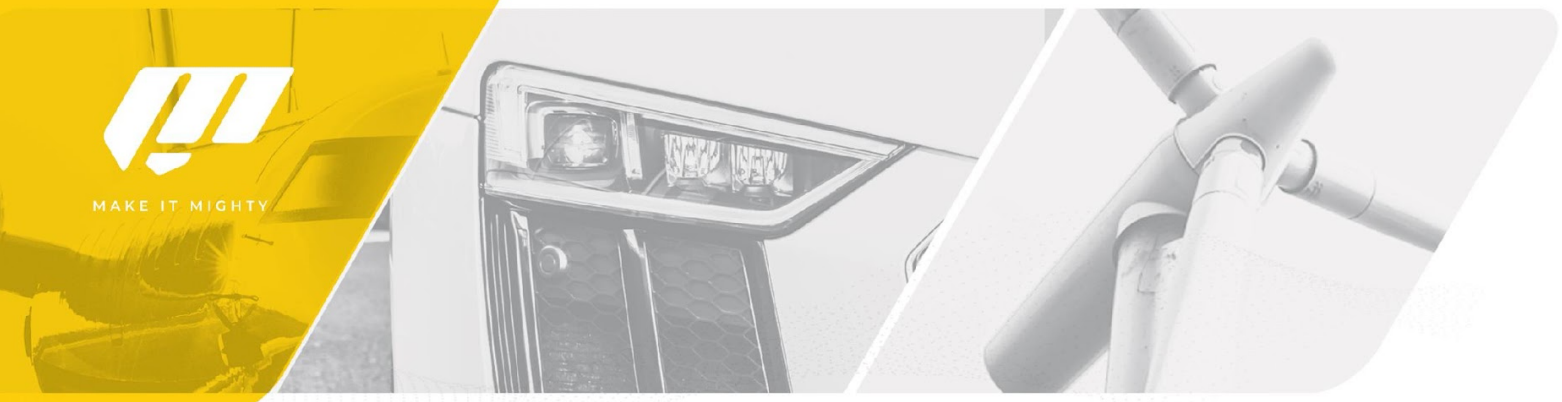
Environmental precautions	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of al environmental released. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses, or onto the ground.

7. Handling and storage

Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing mist/vapors/ Avoid contact with eyes, skin, and clothing. Do not ingest. Avoid prolonged exposure. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear suitable protective clothing. Avoid release to the environment. Observe good industrial hygiene practices.
Storage	Store at room temperature. Keep container tightly closed and sealed until ready for use. Store locked up. Avoid all possible sources of ignition (spark or flame). Store away from incompatible materials (see section 10 of the SDS).

8. Exposure controls/personal protection

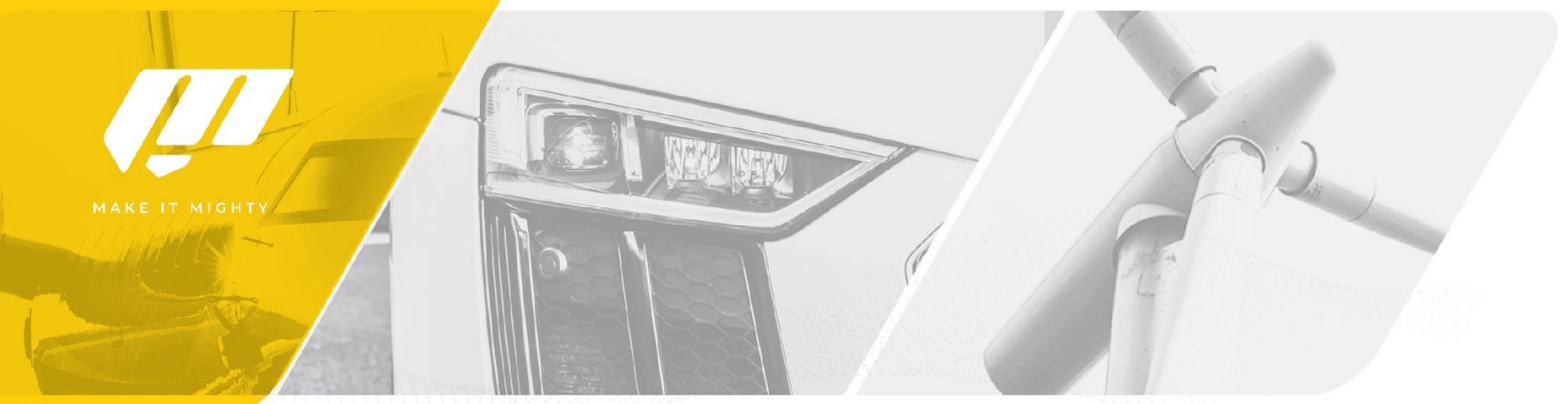
Respiratory protection	Chemical respirator with organic vapor cartridge and full facepiece.
Hand protection	Always wear protective gloves. Do not touch with bare hands. Wash hands thoroughly after handling.
Eye protection	Chemical respirator with organic vapor cartridge and full facepiece.
Skin and body protection	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.
Engineering controls	Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and safety shower.
General hygiene considerations	Observe any medical surveillance requirements. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or



smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

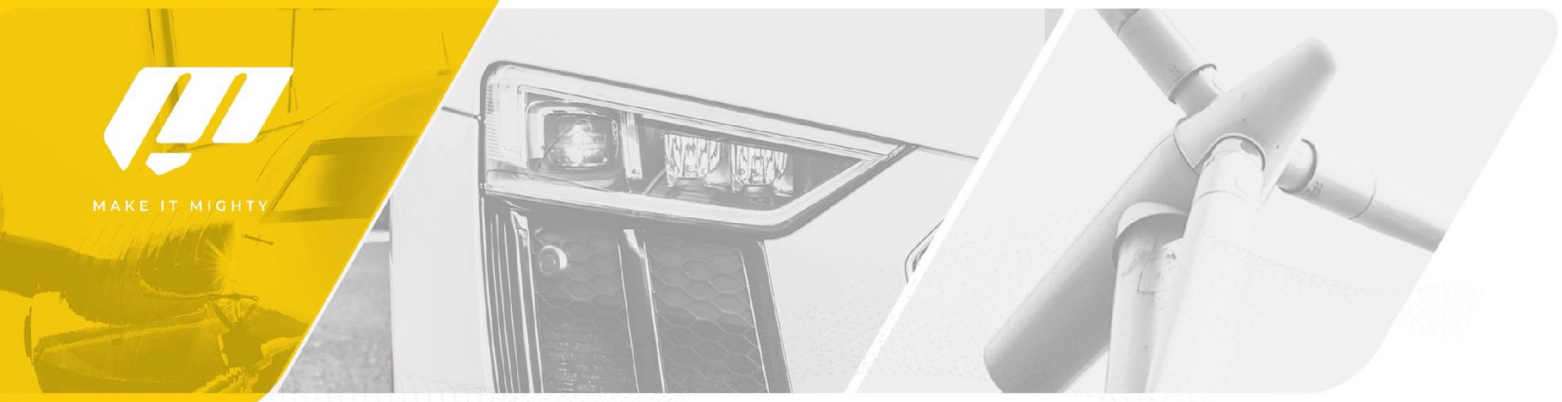
Appearance	
Physical State	Liquid
Form	Liquid
Color	Black
Odor	Not available.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	485.6 °F (252.0 °C) estimated
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Vapor pressure	0.03 hPa estimated
Vapor density	Not available.
Relative density	Not available.
Solubility (water)	Not available.



Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	7.49 lbs/gal estimated
Explosive properties	Not explosive.
Flammability class	Combustible IIIB estimated
Oxidizing properties	Not oxidizing.
Percent volatile	0.02% estimated
Specific gravity	0.9 estimated
VOC	0.02% estimated

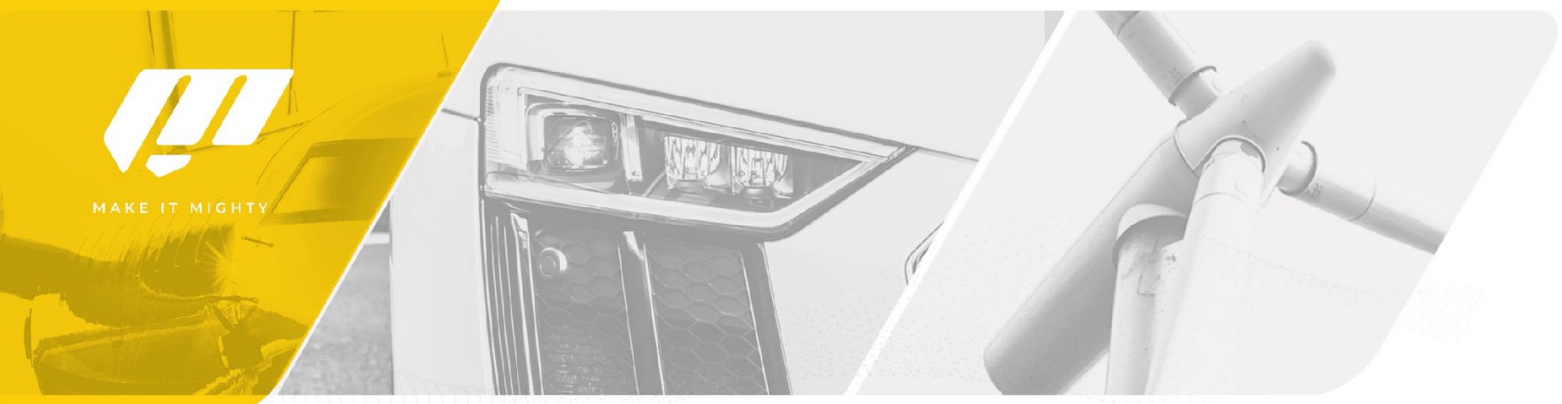
10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage, and transport.
Chemical stability	This product is stable at room temperature.
Possibility of hazardous reactions	No dangerous reactions known under conditions of normal use.
Conditions/materials to avoid	Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. Contact with incompatible materials. Exposure to strong bases, strong oxidizing agents, fluorine, or chlorine trifluoride.
Hazardous decomposition products	Carbon dioxide, Carbon monoxide, Silicon Oxides and Oxides of Nitrogen.



11. Toxicological information

Information on likely routes of exposure	
Inhalation	Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation. May cause an allergic skin reaction.
Eye contact	Causes serious eye irritation.
Ingestion	Expected to be a low ingestion hazard.
Symptoms related to the physical, chemical, and toxicological characteristics	Skin: Skin irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Eyes: Severe irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash. Ingestion: May cause gastrointestinal irritation with nausea, vomiting, and diarrhea, abdominal pain. May also affect the liver and behavior/central nervous system.
Information on toxicological effects	
Acute toxicity	Not known.
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/irritation	Causes serious eye irritation.
Respiratory or skin sensitization	
Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	May cause an allergic skin reaction.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	May cause cancer.



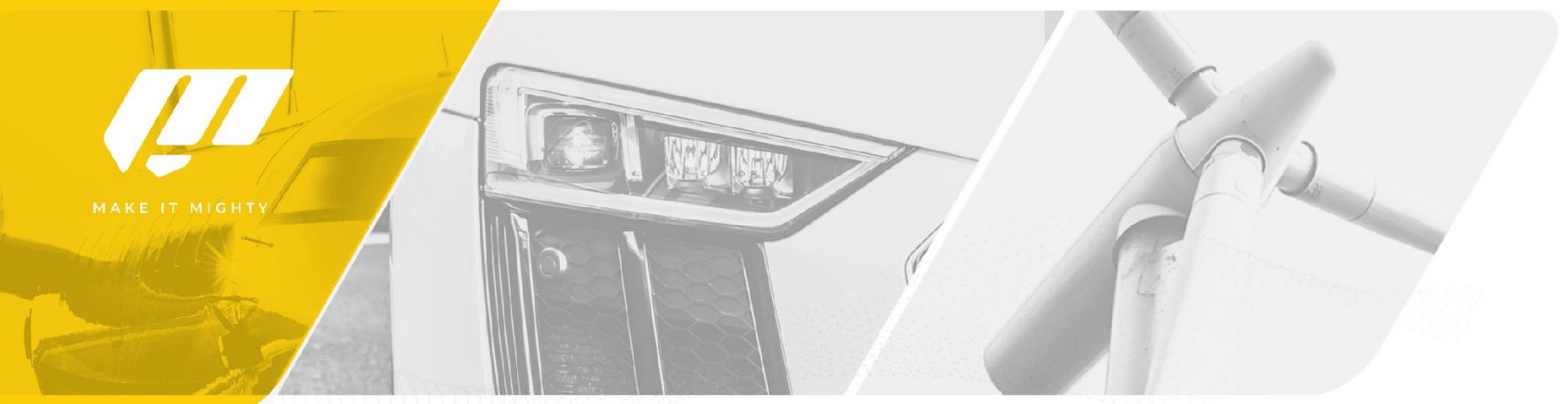
IARC monographs. Overall evaluation of carcinogenicity	Not listed.
OSHA specifically regulated substances (29 CFR 1910.1001-1052)	Not regulated.
US national toxicology program (NTP) on carcinogens	Not listed.
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity – single exposure	Not classified.
Specific target organ toxicity – repeated exposure	Not classified
Aspiration hazard	Not an aspiration hazard.
Chronic effects	Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity	Toxic to aquatic life with long lasting effects.
Persistence and degradability	Not data is available on the degradability of any ingredients in the mixture.
Bio-accumulative potential	No data available.
Mobility in soil	No data available
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

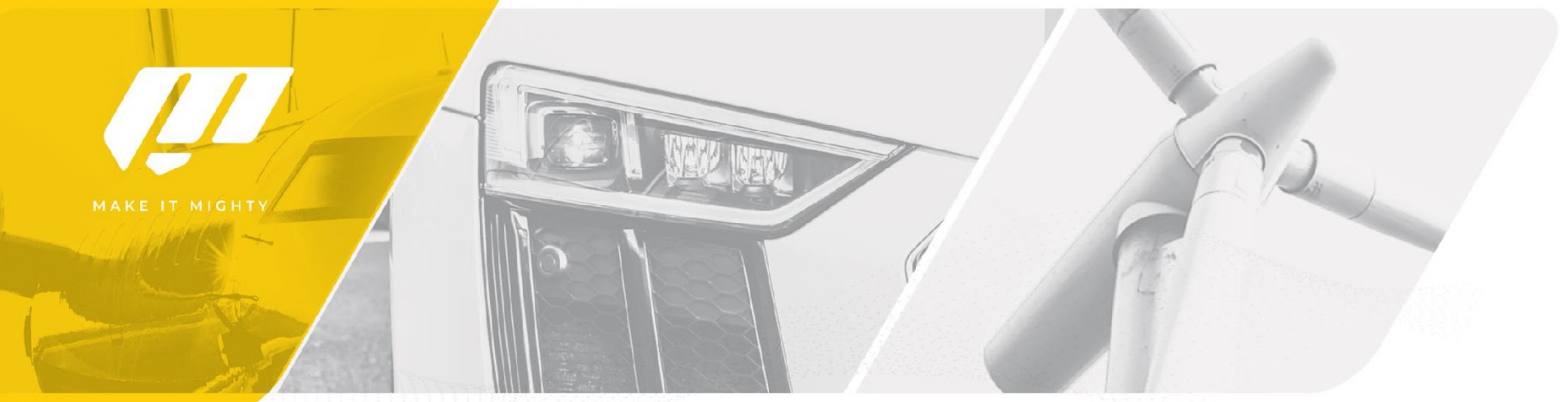
Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used



	container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer, and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT	Not regulated as dangerous goods.
IATA	
UN number	UN3082
UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (EPOXY RESIN)
Transport hazard class	9
Class	-
Subsidiary risk	III
Packing group	Yes
Environmental hazards	9L
ERG Code	Read safety instructions, SDS, and emergency procedures before handling.
Special precautions for user	



Other information	Allowed with restrictions.
Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	

IMDG

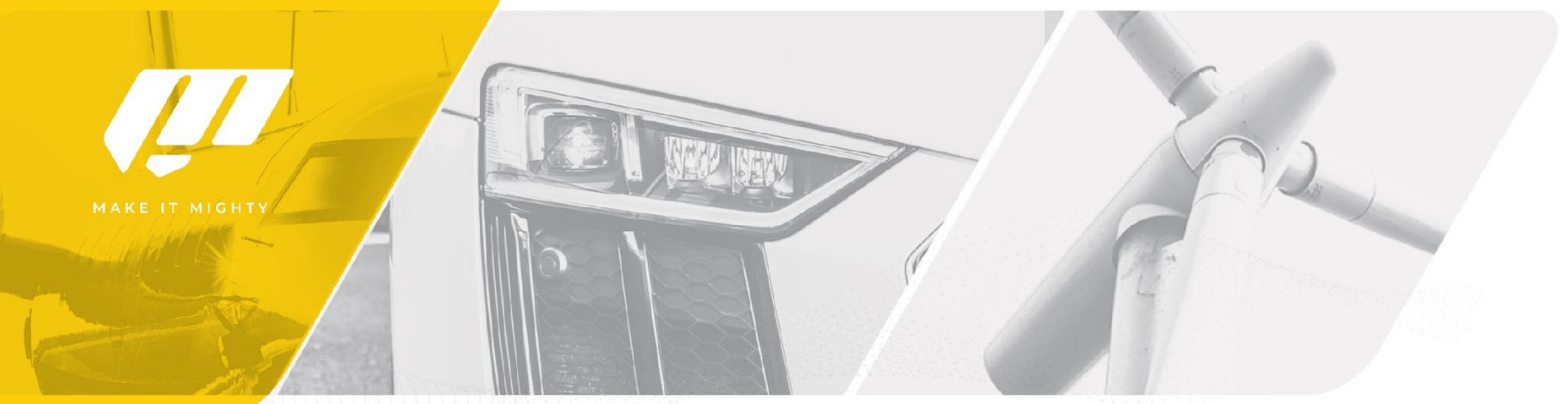
UN number	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN) (BISPHENOL A EPOXY RESIN)
Transport hazard class(es)	
Class	9
Subsidiary risk	-
Packing group	III
Environmental hazards	
Marine pollutant	Yes
EmS	F-A, S-F
Special precautions for user	Read safety instructions, SDS, and emergency procedures before handling.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not established.

IATA; IMDG

Marine pollutant

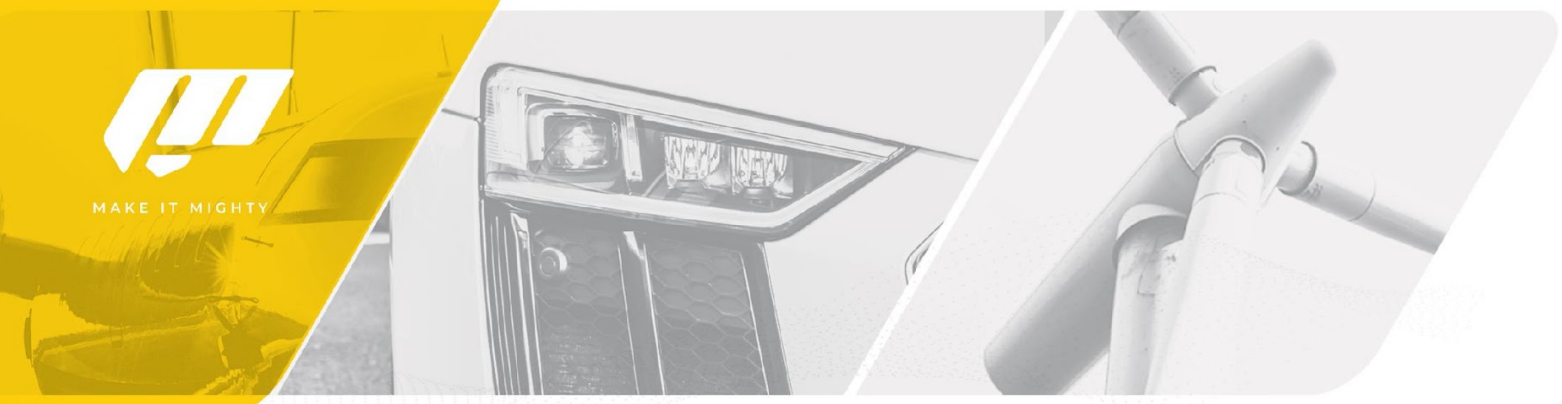
General Information

IMDG regulated marine pollutant.



15. Regulatory information

US federal regulations	This product is a "Hazardous Chemical" as defined by the **OSHA Hazard Communication Standard, 29 CFR 1910.1200**.
Toxic substances control act (TSCA)	POSS (68611-45-0) are listed within the inventories of the **Toxic Substances Control Act (TSCA)**. A registration number is not available for this substance in **REACH (EU)** as the substance or its uses are exempted from registration.
CERCLA hazardous substances list (40 CFR 302.4)	Not listed.
SARA 304 emergency release notification	Not regulated.
OSHA specifically regulated substances (29 CFR 1910.1001-1052)	Not regulated.
Superfund Amendments and Reauthorization Act of 1986 (SARA)	
SARA 302 extremely hazardous substance	Yes
SARA 311/312 hazardous chemical	
Classified hazard categories	Skin corrosion or irritation. Serious eye damage or eye irritation. Respiratory or skin sensitization. Carcinogenicity.
SARA 311 (TRI reporting)	Not regulated.
Other federal regulations	
Clean Air Act (CAA) section 112 Hazardous Air Pollutants (HAPs) list	Not regulated.
Clean Air Act (CAA) section 112(r) accidental release prevention (40 CFR 68.130)	Not regulated.



Safe Drinking Water Act (SDWA)	Not regulated.	

US state regulations

California Proposition 65	California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.	

International Inventories

Country or Region		
Canada	DSL	Listed
	WHMIS	D2A
Europe	EINECS	Listed

16. Other information

Version #	01
HMIS® ratings	Health: 2 Flammability: 0 Physical Hazard: 0
NFPA ratings	

Prepared By: Research and Development Department, MITO Material Solutions, Inc.

Date prepared: 08.15.2022

This information is based on our research, available scientific literature, and most reliable other sources as well as information provided by our vendors. This information is intended only as a guide. The user of this product must read and decide what safety measures are necessary to safely use this product and determine environmental regulatory compliance obligations under any applicable laws.