

1. Identification
Product identifier **NOVOCOATTM DTM EPOXY PART A**
Other means of identification None.

Recommended use Not available.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information
Company Name Armor Limited, Inc.
Address 2410 US-15 South, Sumter, SC 29150

After hours telephone number 1-877-982-7667

Normal work hours telephone number 1-877-982-7667

Website www.armor-inc.com

E-mail customerservice@armor-inc.com

Emergency 24-hour telephone number CHEMTREC North America: +1-800-424-9300, International: +1-703-527-3887

Information on operation hours 8:00 a.m. to 5:00 p.m.

2. Hazard(s) 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 1

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Signal word Danger

Hazard statement May cause cancer. Causes skin irritation. Causes eye irritation. May cause an allergic skin reaction.

Precautionary statement
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 thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.

Response IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. 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. Specific treatment see Section 4 of this SDS. Take off contaminated clothing and wash before reuse. IF exposed or concerned: 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	None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
BISPHENOL A-(EPICHLOROHYDRIN) EPOXY RESIN		25068-38-6	40 - 60
QUARTZ		14808-60-7	10 - 20
CASHEW, NUTSHELL LIQ., GLYCIDYL ETHERS		171263-25-5	1 - 10
1-METHOXYPROPAN-2-OL		107-98-2	< 1
SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM.		64742-95-6	< 1
Other components below reportable levels			32.964834999932

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.
Skin contact	Wash off with soap and water. Wash contaminated clothing before reuse. Wash clothing separately before reuse. Get medical attention if irritation develops and persists.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.
Ingestion	Rinse mouth. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Call a POISON CENTER or doctor/physician if you feel unwell.
Most important symptoms/effects, acute and delayed	Causes eye irritation. May cause skin irritation. Rash. May cause an allergic skin reaction. May cause mild irritation including stinging, watering, and redness.
Indication of immediate medical attention and special treatment needed	Treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting 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.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate personal protective equipment. Do not touch damaged 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 protection, see section 8 of the SDS.
--	---

Methods and materials for containment and cleaning up

Extinguish all flames in the vicinity.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. 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 (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage**Precautions for safe handling**

Provide adequate ventilation. Do not breathe dust/fume/gas/mist/vapors/spray. Wear appropriate personal protective equipment. Do not get this material in contact with eyes. Do not get this material in contact with skin. Do not get this material on clothing. Avoid prolonged exposure. Observe good industrial hygiene practices. Wash thoroughly after handling. Avoid release to the environment.

Conditions for safe storage, including any incompatibilities

Store locked up. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection**Occupational exposure limits****US. OSHA Table Z-1 Permissible Exposure Limits (PEL) for Air Contaminants (29 CFR 1910.1000)**

Components	Type	Value	Form
QUARTZ (CAS 14808-60-7)	PEL	0.05 mg/m3	Respirable dust.

US. OSHA Table Z-3 Permissible Exposure Limits (PEL) for Mineral Dusts (29 CFR 1910.1000)

Components	Type	Value	Form
QUARTZ (CAS 14808-60-7)	TWA	0.1 mg/m3	Respirable.
		2.4 mppcf	Respirable.

US. ACGIH Threshold Limit Values (TLV)

Components	Type	Value	Form
1-METHOXYPROPAN-2-OL (CAS 107-98-2)	STEL	100 ppm	
	TWA	50 ppm	
QUARTZ (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended

Components	Type	Value
QUARTZ (CAS 14808-60-7)	IDLH	50 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards Recommended Exposure Limits (REL)

Components	Type	Value	Form
1-METHOXYPROPAN-2-OL (CAS 107-98-2)	STEL	540 mg/m3	
		150 ppm	
		360 mg/m3	
QUARTZ (CAS 14808-60-7)	TWA	100 ppm	
		0.05 mg/m3	Respirable dust.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Exposure guidelines**US - California OELs: Skin designation**

1-METHOXYPROPAN-2-OL (CAS 107-98-2) Can be absorbed through the skin.

Appropriate engineering controls

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Wear safety glasses; chemical goggles (if splashing is possible).

Skin protection	
Hand protection	Chemical resistant gloves are recommended. If contact with forearms is likely wear gauntlet style gloves.
Other	Wear suitable protective clothing.
Respiratory protection	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	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.

9. Physical and chemical properties

Appearance	Liquid.
Physical state	Liquid.
Form	Viscous. Liquid.
Color	Silver.
Odor	Slight.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	>500 °F (>260 °C)
Flash point	>220.0 °F (>104.4 °C)
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	6.76 hPa estimated
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	None
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	400 °F (204.44 °C) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	12.16 lb/gal estimated
Specific gravity	1.457 estimated

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

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 eye irritation.
Ingestion	Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics

Causes eye irritation. May cause an allergic skin reaction. Mild skin irritation. May cause mild irritation including stinging, watering, and redness.

Information on toxicological effects

Acute toxicity Not available.

Product	Species	Test Results
NOVOCOAT™ DTM EPOXY PART A		
Acute		
Dermal		
LD50	Rat	2083333 mg/kg
Inhalation		
LC50	Rat	45500 mg/l, 4 Hours
Oral		
LD50	Rat	326 g/kg
Components	Species	Test Results
1-METHOXYPROPAN-2-OL (CAS 107-98-2)		
Acute		
Dermal		
LD50	Rabbit	13 - 14 g/kg
Inhalation		
LC50	Rat	54.6 mg/l, 4 Hours
Oral		
LD50	Rat	5.71 g/kg

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye irritation Irritating to eyes.

Respiratory or skin sensitization

Respiratory sensitization Not available.

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

QUARTZ (CAS 14808-60-7)	1 Carcinogenic to humans.
SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM. (CAS 64742-95-6)	3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

QUARTZ (CAS 14808-60-7) Cancer

US. National Toxicology Program (NTP) Report on Carcinogens

QUARTZ (CAS 14808-60-7) Known To Be Human Carcinogen.

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 available.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity Contains a substance which causes risk of hazardous effects to the environment.

Product	Species	Test Results
NOVOCOAT™ DTM EPOXY PART A		
Aquatic		
Crustacea	EC50	Daphnia
		0.8463 mg/l, 48 hours
Fish	LC50	Fish
		2.8317 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Partition coefficient n-octanol / water (log Kow)

1-METHOXYPROPAN-2-OL -0.49

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 When this product as supplied is to be discarded as waste, it does not meet the definition of a RCRA waste under 40 CFR 261.

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 Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT
Not regulated as dangerous goods.

IATA

UN number UN3082
UN proper shipping name Environmentally hazardous substance, liquid, n.o.s. (BISPHENOL A-(EPICHLOROHYDRIN) EPOXY RESIN)

Transport hazard class(es)

Class 9
Subsidiary hazard -
Packing group III
Environmental hazards YES
ERG Code 9L
Special precautions for user Not assigned.

Other information

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

IMDG

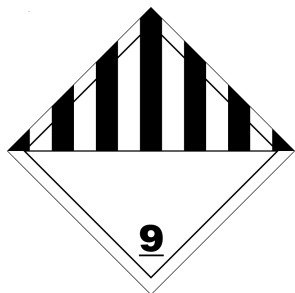
UN number UN3082
UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BISPHENOL A-(EPICHLOROHYDRIN) EPOXY RESIN), MARINE POLLUTANT

Transport hazard class(es)

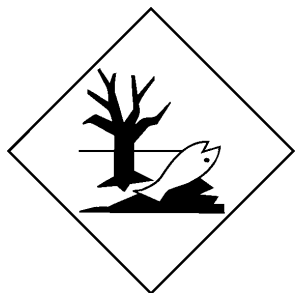
Class 9
Subsidiary hazard -
Packing group III
Environmental hazards
Marine pollutant Yes
EmS F-A, S-F
Special precautions for user Not assigned.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not available.

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)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

QUARTZ (CAS 14808-60-7)

Cancer
lung effects
immune system effects
kidney effects

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312

Yes

Hazardous chemical

Classified hazard categories Skin corrosion or irritation
Serious eye damage or eye irritation
Respiratory or skin sensitization
Carcinogenicity

SARA 313 (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



WARNING: WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm. WARNING: Cancer - www.P65Warnings.ca.gov

California Proposition 65 - CRT: Listed date/Carcinogenic substance

QUARTZ (CAS 14808-60-7)

Listed: October 1, 1988

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 06-12-2020
Revision date 05-19-2025
Version # 06
Further information HMIS® is a registered trade and service mark of the NPCA.
NFPA ratings Health: 2
Flammability: 1
Instability: 0

References

ACGIH
EPA: AQUIRE database
NLM: Hazardous Substances Data Base
US. IARC Monographs on Occupational Exposures to Chemical Agents
IARC Monographs. Overall Evaluation of Carcinogenicity
National Toxicology Program (NTP) Report on Carcinogens
ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices

Disclaimer

This safety data sheet was prepared in accordance with the Safety Data Sheet for Chemical Products (JIS Z 7250:2005). Additional information is given in the Material Safety Data Sheet. The information in the sheet was written based on the best knowledge and experience currently available.