

**1. Identification**

<b>Product identifier</b>	<b>NOVOCOAT™ SP2000AR CERAMIC COATING PART A</b>
<b>Other means of identification</b>	None.
<b>Recommended use</b>	Not available.
<b>Recommended restrictions</b>	None known.
<b>Manufacturer/Importer/Supplier/Distributor information</b>	
<b>Company Name</b>	ErgonArmor, a division of Ergon Asphalt & Emulsions, Inc.
<b>Address</b>	2829 Lakeland Drive Jackson, MS 39232 USA
<b>After hours telephone number</b>	1-800-222-7122
<b>Normal work hours telephone number</b>	1-877-982-7667
<b>Website</b>	www.ergonarmor.com
<b>E-mail</b>	sds@ergon.com
<b>Emergency 24-hour telephone number</b>	CHEMTREC: North America 1-800-424-9300 International 1-800-527-3887
<b>Information on operation hours</b>	8:00 a.m. to 5:00 p.m.

**2. Hazard(s) identification**

<b>Physical hazards</b>	Not classified.	
<b>Health hazards</b>	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2
	Sensitization, skin	Category 1
	Carcinogenicity	Category 1
<b>Environmental hazards</b>	Not classified.	
<b>OSHA defined hazards</b>	Not classified.	

**Label elements**

<b>Signal word</b>	Danger
<b>Hazard statement</b>	May cause cancer. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation.
<b>Precautionary statement</b>	
<b>Prevention</b>	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.
<b>Response</b>	Specific treatment see Section 4 of this SDS. IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
<b>Storage</b>	Store locked up.
<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	Common name and synonyms	CAS number	%
PROPANE 2,2-BIS[P-2,3-EPOXYPROPOXY)PHE NYL]-, POLYMERS		25085-99-8	20 - 40
GLYCIDYL ETHER OF 3-ALKYL PHENOL		171263-25-5	1 - 10
PHENOL-FORMALDEHYDE POLYMER GLYCIDYL ETHER		28064-14-4	1 - 10
1-CHLORO-2,3-EPOXYPROPANE		106-89-8	< 1
4,4'-ISOPROPYLIDENEDIPHENOL-E PICHLOOROXYDRIN COPOLYMER		25068-38-6	< 1
QUARTZ		14808-60-7	< 1
SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM.		64742-95-6	< 1
TITANATE(2-), TETRAKIS[2,2-BIS[(2-PROPENYLOX Y)METHYL]-1-BUTANOLATO-KO]BI S(DITRIDECYL PHOSPHITO-KO")-, HYDROGEN (1:2)		64157-14-8	< 1
Other components below reportable levels			60.764

### 4. First-aid measures

<b>Inhalation</b>	Move to fresh air. Oxygen or artificial respiration if needed. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Wash off with soap and water. Wash contaminated clothing before reuse. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Rinse immediately with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.
<b>Ingestion</b>	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.
<b>Most important symptoms/effects, acute and delayed</b>	Direct contact with eyes may cause temporary irritation. May cause mild irritation including stinging, watering, and redness.
<b>Indication of immediate medical attention and special treatment needed</b>	Treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	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. Wear appropriate protective equipment and clothing during clean-up. Avoid contact with skin and eyes. Keep upwind. Keep out of low areas. Ensure adequate ventilation. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection, see section 8 of the SDS. Local authorities should be advised if significant spillages cannot be contained.

### Methods and materials for containment and cleaning up

This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.

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

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

### Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store locked up.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
1-CHLORO-2,3-EPOXYPROPANE (CAS 106-89-8)	PEL	19 mg/m <sup>3</sup>	
		5 ppm	
QUARTZ (CAS 14808-60-7)	PEL	0.05 mg/m <sup>3</sup>	Respirable dust.

#### US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
QUARTZ (CAS 14808-60-7)	TWA	0.1 mg/m <sup>3</sup>	Respirable.
		2.4 mppcf	Respirable.

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
1-CHLORO-2,3-EPOXYPROPANE (CAS 106-89-8)	TWA	0.5 ppm	
QUARTZ (CAS 14808-60-7)	TWA	0.025 mg/m <sup>3</sup>	Respirable fraction.

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
QUARTZ (CAS 14808-60-7)	TWA	0.05 mg/m <sup>3</sup>	Respirable dust.

### Biological limit values

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

### Exposure guidelines

#### US - California OELs: Skin designation

1-CHLORO-2,3-EPOXYPROPANE (CAS 106-89-8) Can be absorbed through the skin.

#### US - Minnesota Haz Subs: Skin designation applies

1-CHLORO-2,3-EPOXYPROPANE (CAS 106-89-8) Skin designation applies.

#### US - Tennessee OELs: Skin designation

1-CHLORO-2,3-EPOXYPROPANE (CAS 106-89-8) Can be absorbed through the skin.

## US ACGIH Threshold Limit Values: Skin designation

1-CHLORO-2,3-EPOXYPROPANE (CAS 106-89-8) Danger of cutaneous absorption

## US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

1-CHLORO-2,3-EPOXYPROPANE (CAS 106-89-8) 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

<b>Appearance</b>	Liquid.
<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>Color</b>	Varies
<b>Odor</b>	Not available.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	Not available.
<b>Flash point</b>	> 200.0 °F (> 93.3 °C)
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Density</b>	14.50 lb/gal @75°F
<b>Specific gravity</b>	1.75 @20°C

## 10. Stability and reactivity

**Reactivity** The product is stable and non-reactive under normal conditions of use, storage and transport.

<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Prolonged inhalation may be harmful.
<b>Skin contact</b>	Causes skin irritation. May cause an allergic skin reaction.
<b>Eye contact</b>	Causes serious eye irritation.
<b>Ingestion</b>	Expected to be a low ingestion hazard.

**Symptoms related to the physical, chemical and toxicological characteristics**  
Exposure may cause temporary irritation, redness, or discomfort. May cause an allergic skin reaction. Causes eye irritation. Causes serious eye irritation.

### Information on toxicological effects

#### Acute toxicity

Product	Species	Test Results
NOVOCOAT™ SP2000AR CERAMIC COATING PART A		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rat	1.923e+006 mg/kg
<b>Oral</b>		
LD50	Rat	728200 mg/kg

Components	Species	Test Results
1-CHLORO-2,3-EPOXYPROPANE (CAS 106-89-8)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	300 mg/kg
<b>Oral</b>		
LD50	Rat	40 mg/kg

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

<b>Skin corrosion/irritation</b>	Irritating to skin.
<b>Serious eye damage/eye irritation</b>	Causes serious eye irritation.

#### Respiratory or skin sensitization

<b>Respiratory sensitization</b>	Not available.
<b>Skin sensitization</b>	May cause allergic skin disorders in sensitive individuals.

**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

1-CHLORO-2,3-EPOXYPROPANE (CAS 106-89-8)	2A Probably carcinogenic to humans.
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
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#### US. National Toxicology Program (NTP) Report on Carcinogens

1-CHLORO-2,3-EPOXYPROPANE (CAS 106-89-8)	Reasonably Anticipated to be a Human Carcinogen.
QUARTZ (CAS 14808-60-7)	Known To Be Human Carcinogen.

<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.
<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not available.
<b>Chronic effects</b>	Prolonged inhalation may be harmful.

## 12. Ecological information

**Ecotoxicity** The product contains a substance which is toxic to aquatic organisms.

Product	Species		Test Results
NOVOCOAT™ SP2000AR CERAMIC COATING PART A			
<b>Aquatic</b>			
Crustacea	EC50	Daphnia	10.8513, 48 hours
Fish	LC50	Fish	6.0298, 96 hours
<i>Acute</i>			
Crustacea	EC50	Daphnia	30294.1426, 48 hours estimated
Fish	LC50	Fish	6064.0347, 96 hours estimated
<b>Components</b>		<b>Species</b>	<b>Test Results</b>
1-CHLORO-2,3-EPOXYPROPANE (CAS 106-89-8)			
<b>Aquatic</b>			
<i>Acute</i>			
Fish	LC50	Fathead minnow ( <i>Pimephales promelas</i> )	>= 9.1 - <= 12.3 mg/l, 96 hours
PHENOL-FORMALDEHYDE POLYMER GLYCIDYL ETHER (CAS 28064-14-4)			
<b>Aquatic</b>			
<i>Acute</i>			
Fish	LC50	Fish	> 1 - < 10 mg/l

\* 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-CHLORO-2,3-EPOXYPROPANE 0.45

**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. (PROPANE 2,2-BIS[P-2,3-EPOXYPROPOXY)PHENYL]-,POLYMERS)

**Transport hazard class(es)**

**Class** 9

**Subsidiary risk** -

**Packing group** III

**Environmental hazards** Yes

**ERG Code** 9L

**Special precautions for user** Not available.

**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. (PROPANE 2,2-BIS[P-2,3-EPOXYPROPOXY)PHENYL]-,POLYMERS), MARINE POLLUTANT

**Transport hazard class(es)**

**Class** 9

**Subsidiary risk** -

**Packing group** III

**Environmental hazards**

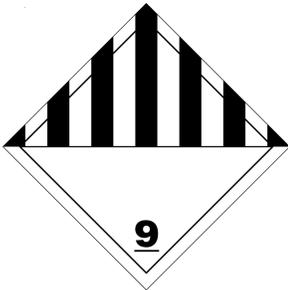
**Marine pollutant** Yes

**EmS** F-A, S-F

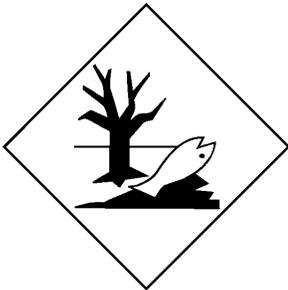
**Special precautions for user** Not available.

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

**IATA; IMDG**



**Marine pollutant**



**15. Regulatory information**

**US federal regulations** All components are on the U.S. EPA TSCA Inventory List.

**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)**

1-CHLORO-2,3-EPOXYPROPANE (CAS 106-89-8) Listed.

**SARA 304 Emergency release notification**

Oxirane, (chloromethyl)- (CAS 106-89-8) 100 LBS

**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**

Chemical name	CAS number	Reportable quantity (pounds)	Threshold planning quantity (pounds)	Threshold planning quantity, lower value (pounds)	Threshold planning quantity, upper value (pounds)
1-CHLORO-2,3-EPOXYPROPANE	106-89-8	100	1000		

**SARA 311/312 Hazardous chemical** Yes

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

**SARA 313 (TRI reporting)**

Chemical name	CAS number	% by wt.
1-CHLORO-2,3-EPOXYPROPANE	106-89-8	< 1

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

1-CHLORO-2,3-EPOXYPROPANE (CAS 106-89-8)

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

1-CHLORO-2,3-EPOXYPROPANE (CAS 106-89-8)

**Safe Drinking Water Act (SDWA)** Not regulated.**US state regulations****US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

1-CHLORO-2,3-EPOXYPROPANE (CAS 106-89-8)  
QUARTZ (CAS 14808-60-7)  
SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM. (CAS 64742-95-6)

**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.

**California Proposition 65 - CRT: Listed date/Carcinogenic substance**

1-CHLORO-2,3-EPOXYPROPANE (CAS 106-89-8) Listed: October 1, 1987  
QUARTZ (CAS 14808-60-7) Listed: October 1, 1988

**California Proposition 65 - CRT: Listed date/Male reproductive toxin**

1-CHLORO-2,3-EPOXYPROPANE (CAS 106-89-8) Listed: September 1, 1996

**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

Country(s) or region	Inventory name	On inventory (yes/no)*
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** 06-16-2020

**Revision date** 03-24-2023

**Version #** 03

**NFPA ratings**  
Health: 2  
Flammability: 0  
Instability: 0

**Disclaimer** The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

**Revision information** This document has undergone significant changes and should be reviewed in its entirety.