SAFETY DATA SHEET



1. Identification

Product identifier NOVOCOAT™ EP3800 CERAMIC CARBIDE FC PART A, NOVOCOAT™ EP3800 CERAMIC

CARBIDE SC PART A

Other means of identification None

Recommended use Highly abrasive service

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

ErgonArmor, a division of Ergon Asphalt & Emulsions, Inc. **Company Name**

Address 2829 Lakeland Drive Jackson, MS 39232

USA

After hours telephone

number

Normal work hours

telephone number

1-877-982-7667

1-800-222-7122

Website www.ergonarmor.com E-mail sds@ergon.com

Emergency 24-hour telephone number

CHEMTREC: North America 1-800-424-9300 International 1-800-527-3887

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

hours

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Category 2 Skin corrosion/irritation

> Serious eye damage/eye irritation Category 2 Sensitization, skin Category 1

Environmental hazards Not classified. **OSHA** defined hazards Not classified.

Label elements



Signal word

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

Precautionary statement

Prevention Contaminated work clothing must not be allowed out of the workplace. Wear eve protection/face

protection. Wear protective gloves. Wash thoroughly after handling. Avoid breathing

dust/fume/gas/mist/vapors/spray.

Response If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and

> wash it before reuse. 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 eye irritation persists: Get medical

advice/attention.

Storage Store in accordance with local/regional/national regulations.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information None.

Material name: NOVOCOAT™ EP3800 CERAMIC CARBIDE FC PART A, NOVOCOAT™ EP3800 CERAMIC CARBIDE SC PART A 6190 Version #: 04 Revision date: 10-21-2021 Issue date: 06-12-2020

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Bisphenol F-(epichlorohydrin);epoxy resin		28064-14-4	5 - 20
Propane,2,2-bis[p-(2,3-epoxypropox y)phenyl]-,polymers		25085-99-8	5 - 20
Other components below reportable I	evels		74.5

^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or

> artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other

proper respiratory medical device. Call a physician or poison control center immediately.

Remove contaminated clothing immediately and wash skin with soap and water. Call a physician or Skin contact

poison control center immediately. Chemical burns must be treated by a physician. For minor skin contact, avoid spreading material on unaffected skin. Wash contaminated clothing before reuse.

Wash clothing separately before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. If a contact lens is present, DO

NOT delay irrigation or attempt to remove the lens. Continue rinsing. Call a physician or poison

control center immediately.

Ingestion Call a physician or poison control center immediately. If swallowed, rinse mouth with water (only if

> the person is conscious). Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other

> Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause redness

proper respiratory medical device.

Most important symptoms/effects, acute and

delayed

Indication of immediate medical attention and special treatment needed

General information

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the

Wash contaminated clothing before reuse. Ensure that medical personnel are aware of the

and pain. May cause an allergic skin reaction. Irritation of eyes. Skin irritation.

doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

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

Move containers from fire area if you can do so without risk.

Fire fighting equipment/instructions

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Do not touch or walk through spilled material. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Avoid the generation of dusts during clean-up. Collect dust using a vacuum cleaner equipped with HEPA filter. 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. Stop the flow of material, if this is without risk.

Large Spills: Wet down with water and dike for later disposal. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Shovel the material into waste container. Following product recovery, flush area with water.

Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. 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. For waste disposal, see section 13 of the SDS.

Environmental precautions

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

7. Handling and storage

Precautions for safe handling

Minimize dust generation and accumulation. Provide appropriate exhaust ventilation at places where dust is formed. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit At this time, the other constituents have no known exposure limits.

Biological limit values

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

Appropriate engineering controls

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

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles). Wear safety glasses; chemical goggles (if splashing is possible).

Skin protection

Hand protection

Wear appropriate chemical resistant gloves. Chemical resistant gloves are recommended. If contact

with forearms is likely wear gauntlet style gloves.

Other

Wear appropriate chemical resistant 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

Physical state Paste.

Form Cream highly-filled paste.

Color Cream

Odor Not available.
Odor threshold Not available.
pH Not available.
Melting point/freezing point Not available.
Initial boiling point and Not available.

boiling range

Flash point Not available.

Evaporation rate Not available. **Flammability (solid, gas)** Not available. **Upper/lower flammability or explosive limits**

Flammability limit - lower

Not available.

(%)

Flammability limit -

upper (%)

Not available.

Explosive limit - lower

(%)

Not available.

Explosive limit - upper

(%)

Not available.

Vapor pressureNot available.Vapor densityNot available.Relative densityNot available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

Other information

Bulk density16.6 lb/galExplosive propertiesNot explosive.Oxidizing propertiesNot oxidizing.Specific gravity1.99 @21°C/70°F

10. Stability and reactivity

ReactivityThe 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** Hazardous polymerization does not occur.

reactions

Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid

temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials Acids. Strong oxidizing agents. Chlorine.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation Dust may irritate respiratory system. Prolonged inhalation may be harmful

Skin contactCauses skin irritation.Eye contactCauses eye irritation.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics

Irritation of eyes. Skin irritation. Symptoms may include stinging, tearing, redness, swelling, and

blurred vision. May cause redness and pain.

Information on toxicological effects

Acute toxicity Not known.

Skin corrosion/irritationCauses skin irritation. **Serious eye damage/eye**Causes eye irritation.

irritation

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicityNo data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity This product contains crystalline silica. Silica is a known carcinogen; however in this encapsulated

form the normal routes of exposure are unavailable.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicityThis 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. Prolonged exposure may cause chronic effects

12. Ecological information

EcotoxicityThe product contains a substance which is toxic to aquatic organisms.

Product Species Test Results

NOVOCOAT™ EP3800 CERAMIC CARBIDE FC PART A, NOVOCOAT™ EP3800 CERAMIC CARBIDE SC PART A

Aquatic

Crustacea EC50 Daphnia 628.2208 mg/l, 48 hours estimated

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

Bioaccumulative potentialNo data available. **Mobility in soil**No data available.

Other adverse effectsNo 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. Incinerate the

material under controlled conditions in an approved incinerator. Dispose of contents/container in accordance with local/regional/national/international regulations. 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 UN3077

UN proper shipping name Environmentally hazardous substance, solid, n.o.s. (Bisphenol F-(epichlorohydrin);epoxy resin)

Transport hazard class(es)

Class 9

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

Subsidiary risk Packing group III**Environmental hazards** No. **ERG Code** 9L

Special precautions for

user

Not Regulated if weight is less or equal to 5L (liquid) or 5kg (solid).

Other information Passenger and cargo

aircraft

Allowed with restrictions.

Cargo aircraft only

Allowed with restrictions.

IMDG

UN number UN3077

UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Bisphenol

F-(epichlorohydrin); epoxy resin), MARINE POLLUTANT

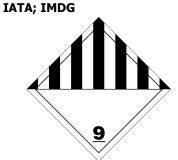
Transport hazard class(es)

9 Class **Subsidiary risk Packing group** Ш **Environmental hazards**

Marine pollutant Yes F-A, S-F **EmS**

Special precautions for Read safety instructions, SDS and emergency procedures before handling.

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



Marine pollutant



General information IMDG Regulated Marine Pollutant.

15. Regulatory information

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

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 1910.1001-1052)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Yes

Hazardous chemical

Classified hazard Skin corrosion or irritation

categoriesSerious eye damage or eye irritation
Respiratory or skin sensitization

.....

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

Not regulated.

(SDWA)

US state regulations

California Proposition 65



WARNING: WARNING: This product contains a chemical known to the State of California to cause cancer.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	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)

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

 Issue date
 06-12-2020

 Revision date
 10-21-2021

Version # 04

NFPA ratings Health: 2

Flammability: 0 Instability: 0

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).

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. Ergon Armor cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

Revision information

Product and Company Identification: Alternate Trade Names Transport Information: Material Transportation Information