SAFETY DATA SHEET



1. Identification

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

CARBIDE SC PART B

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

1-800-222-7122

After hours telephone

number

Normal work hours

telephone number

1-877-982-7667

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

hours

8:00 a.m. to 5:00 p.m.

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Skin corrosion/irritation Category 1

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

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

Label elements



Signal word Danger

Hazard statement Causes severe skin burns and eye damage. Suspected of causing genetic defects. Causes serious

eye damage. May cause an allergic skin reaction.

Precautionary statement

Prevention Avoid breathing dust/fume/gas/mist/vapors/spray. Observe good industrial hygiene practices.

Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Obtain special instructions before use. Do not handle until all safety precautions have

been read and understood.

Response Specific treatment see Section 4 of this SDS. Wash hands after handling. IF SWALLOWED: Rinse

mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated

clothing before reuse. IF exposed or concerned: Get medical advice/attention.

Storage Store locked up.

Disposal

Hazard(s) not otherwise

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

classified (HNOC)

None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
[3-(Aminomethyl)phenyl]methanami ne		1477-55-0	1 - 10
Bisphenol A		80-05-7	1 - 10
PHENOL, 4-NONYL-, BRANCHED		84852-15-3	1 - 10
Other components below reportable le	evels		92.16

^{*}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.

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

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.

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

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

proper respiratory medical device.

Most important

symptoms/effects, acute and

delayed

Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause redness and pain. May cause an allergic skin reaction. Irritation of eyes. Skin irritation.

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

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

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

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.

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

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.

US. ACGIH Threshold Limit Values

Components	Туре	Value	
[3-(Aminomethyl)phenyl]me thanamine (CAS 1477-55-0)	Ceiling	0.1 mg/m3	
US. NIOSH: Pocket Guide to Che Components	mical Hazards Type	Value	
[3-(Aminomethyl)phenyl]me thanamine (CAS 1477-55-0)	Ceiling	0.1 mg/m3	

Biological limit values

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

Exposure guidelines

US - California OELs: Skin designation

[3-(Aminomethyl)phenyl]methanamine (CAS 1477-55-0) Can be absorbed through the skin.

US - Tennessee OELs: Skin designation

[3-(Aminomethyl)phenyl]methanamine (CAS 1477-55-0) Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

[3-(Aminomethyl)phenyl]methanamine (CAS 1477-55-0) Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

[3-(Aminomethyl)phenyl]methanamine (CAS 1477-55-0) 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 with side shields (or goggles). Avoid contact with eyes. Provide an emergency

eye wash fountain and quick drench shower in the immediate work area.

Skin protection

Hand protection Wear appropriate chemical resistant 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. Do not get in eyes, on skin, on clothing. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance Blue highly filled paste.

Physical state Paste.
Form Paste.
Color Blue.
Odor Amine.

Odor thresholdNot available.pHNot available.Melting point/freezing pointNot available.Initial boiling point andNot available.

boiling range

Flash point

Evaporation rate

Flammability (solid, gas)

Upper/lower flammability or explosive limits

Flammability limit - lower Not available. (%)

Flammability limit -

upper (%)

Explosive limit - lower

(%)

Explosive limit - upper

(%)

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 density18.6 lb/galSpecific gravity2.23 @21°C/72°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.

Not available.

Not available.

Not available.

Possibility of hazardous

reactions

Hazardous polymerization does not occur.

Conditions to avoid Incompatible materials

Contact with 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 Prolonged inhalation may be harmful.

Skin contact Causes severe skin burns. May cause an allergic skin reaction.

Eye contact Causes serious eye damage.

Ingestion Expected to be a low ingestion hazard. However, ingestion is not likely to be a primary route of

occupational exposure.

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.

Components Species Test Results

Bisphenol A (CAS 80-05-7)

<u>Acute</u>

Oral

LD50 Rat 3300 mg/kg

Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/eye

irritation

Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization May cause an allergic skin reaction. **Germ cell mutagenicity** Suspected of causing genetic defects.

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

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 available.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects

12. Ecological information

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

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

Product Species Test Results

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

Aquatic

Crustacea EC50 Daphnia 1.5947 mg/l, 48 hours estimated LC50 5.0337 mg/l, 96 hours estimated Fish Fish

Test Results Components **Species**

Bisphenol A (CAS 80-05-7)

Aquatic

EC50 Crustacea Water flea (Daphnia magna) 9.2 - 11.4 mg/l, 48 hours LC50 Fish Fathead minnow (Pimephales promelas) 3.6 - 5.4 mg/l, 96 hours

PHENOL, 4-NONYL-, BRANCHED (CAS 84852-15-3)

Aquatic

Crustacea EC50 Clam (Mulinia lateralis) 0.0379 mg/l, 48 hours Fish LC50 Winter flounder (Pleuronectes 0.017 mg/l, 96 hours

americanus)

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)

3.32 Bisphenol A 5.71 PHENOL, 4-NONYL-, BRANCHED

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. 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 /

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 unused products

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

UN number UN3259

UN proper shipping name Amines, solid, corrosive, n.o.s., or Polyamines, solid, corrosive n.o.s. (Metaxylenediamine)

Transport hazard class(es)

8 Class **Subsidiary risk** 8 Label(s) Packing group III **Environmental hazards**

> Marine pollutant no

Special precautions for

user

Read safety instructions, SDS and emergency procedures before handling.

Special provisions IB8, IP3, T1, TP33

Packaging exceptions 154

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

Packaging non bulk 213 **Packaging bulk** 240

IATA

UN number UN3259

UN proper shipping name Amines, solid, corrosive, n.o.s. (Metaxylenediamine)

8L

Transport hazard class(es) 8 Class **Subsidiary risk Packing group** III**Environmental hazards** No. **ERG Code**

Special precautions for

Other information

user

Read safety instructions, SDS and emergency procedures before handling.

Passenger and cargo

aircraft

Allowed with restrictions.

Cargo aircraft only

Allowed with restrictions.

IMDG

UN number UN3259

UN proper shipping name AMINES, SOLID, CORROSIVE, N.O.S. or POLYAMINES, SOLID, CORROSIVE, N.O.S.

(Metaxylenediamine), MARINE POLLUTANT

Transport hazard class(es)

Class 8 **Subsidiary risk Packing group** III**Environmental hazards**

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

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

DOT



IATA; IMDG



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)

PHENOL, 4-NONYL-, BRANCHED (CAS 84852-15-3)

1.0 % One-Time Export Notification only.

Bisphenol A Action Plan

TSCA Chemical Action Plans, Chemicals of Concern

Bisphenol A (CAS 80-05-7)
PHENOL, 4-NONYL-, BRANCHED (CAS 84852-15-3)

Nonylphenol (NP) and Nonylphenol Ethoxylates (NPEs) Action Plan

CERCLA Hazardous Substance List (40 CFR 302.4)

Bisphenol A (CAS 80-05-7) 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

Germ cell mutagenicity

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Bisphenol A	80-05-7	1 - 10
PHENOL, 4-NONYL-, BRANCHED	84852-15-3	1 - 10

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Bisphenol A (CAS 80-05-7)

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 and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Female reproductive toxin

Bisphenol A (CAS 80-05-7) Listed: May 11, 2015

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Bisphenol A (CAS 80-05-7)

International Inventories

Philippines

Country(s) or region

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

(PICCS)

Inventory name

TaiwanTaiwan Chemical Substance Inventory (TCSI)YesUnited States & Puerto RicoToxic Substances Control Act (TSCA) InventoryYes

Philippine Inventory of Chemicals and Chemical Substances

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: 3

Flammability: 1 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. 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.

On inventory (yes/no)*

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).