

# ERGON ARMOR

Novocoat ER-2010 A  
MSDS No. EA095

Revision No. 1  
May 26, 2010

## Section 1 – Chemical Product and Company Information

<b>Product/Chemical Name:</b>	Novocoat ER-2010 A
<b>Chemical Formula:</b>	NA
<b>CAS Number:</b>	NA
<b>Other Designations:</b>	Epoxy Resin
<b>General Use:</b>	Coatings
<b>Manufacturer:</b>	Ergon Armor; P O Box 1639; Jackson MS 39215-1639; Phone 601-933-3000; Hours of Operation 8:00 am – 5:00 pm; ERGON 24 Hour Emergency Phone Number 1-800-222-7122; CHEMTREC 1-800-424-9300.

## Section 2 – Hazards Information

### EMERGENCY OVERVIEW

HMIS  
H-2  
F-1  
R-0  
PPE\*  
\* Sec.8

#### POTENTIAL HEALTH EFFECTS

**Primary Entry Routes:** Inhalation and absorption.

**Target Organs:** Mucous membranes, skin

#### Acute Effects

**Inhalation:** Irritating to mucous membranes and respiratory tract.

**Eye:** Irritating to eyes

**Skin:** Irritating to skin. May cause sensitization by skin contact

**Ingestion:** Not expected to be harmful under normal conditions of use.

**Carcinogenicity:** Carbon Black is classified as a possible human carcinogen when in respirable dust form. Once product is set, do not sand without appropriate respiratory protection.

**Medical Conditions Aggravated by Long-Term Exposure:** Dermatitis.

**Chronic Effects:** Prolonged and repeated skin contact may cause dermatitis, photosensitization, and melanosis. Adverse symptoms from prolonged exposure may include respiratory tract irritation and coughing. Eyes may become painful and red after prolonged exposure.

## Section 3 – Composition / Information on Ingredients

Ingredient Name	CAS Number	% Weight
Epoxy Resin	25068-38-6	35-45
Micronized Elastomer	Mixture	15-25
Carbon Black	1333-86-4	< 1%
Mineral Filler	Mixture	35-40

INGREDIENT	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH IDHL
	TWA	STEL	TWA	STEL	TWA	STEL	
Epoxy Resin	None estab.	None estab.	None estab.	None estab.	None estab.	None estab.	None estab.
Micronized Elastomer	None estab.	None estab.	None estab.	None estab.	None estab.	None estab.	None estab.
Carbon Black	3.5 mg/m <sup>3</sup>	None estab.	3.5 mg/m <sup>3</sup>	None estab.	3.5 mg/m <sup>3</sup>	None estab.	1750 mg/m <sup>3</sup>
Mineral Filler	20 mppcf (containing <1% quartz)	None estab.	2 mg/m <sup>3</sup> (respirable particulate)	None estab.	2 mg/m <sup>3</sup> (respirable particulate)	None estab.	1,000 mg/m <sup>3</sup>

## Section 4 – First Aid Measures

**Inhalation:** Move exposed person to fresh air. If not breathing, provide artificial respiration by trained personnel. Get medical attention if adverse health effects persist or are severe.

**Eye Contact:** Flush thoroughly with water for at least 15 minutes. Get medical attention.

**Skin Contact:** Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly before removing. Continue to rinse for at least 10 minutes. Get medical attention if irritation worsens. Wash clothing before reuse. Clean shoes thorough before reuse.

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**Ingestion:** Wash out mouth with water. Do not induce vomiting. Seek medical attention.

**After first aid, get appropriate in-plant paramedic or community medical support.**

**Special Precautions/Procedures:** It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation because of irritation hazard. Contact local poison treatment specialist if large amounts have been ingested.

Provide adequate ventilation to keep vapors/dusts below allowable exposure levels. Use PPE appropriate for the task.

### Section 5 – Fire Fighting Measures

**Flash Point:** > 200°F

**Flash Point Method:** NA

**Auto Ignition Temperature:** Not Determined

**LEL:** NA

**UEL:** NA

**Flammability Classification:** Class IIIB

**Extinguishing Media:** Dry chemical, foam and carbon dioxide. Do **NOT** use water jet.

**Unusual Fire or Explosion Hazards:** In a fire or if heated, a pressure increase will occur and the container may burst.

**Hazardous Combustion Products:** Oxides of carbon

**Fire-Fighting Instructions:** Do not release runoff from fire control methods to sewers or waterways. Use a water supply to cool fire-exposed containers.

**Fire-Fighting Equipment:** Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.



### Section 6 – Accidental Release Matters

**Spill/Leak Procedures:** Stop spill at source. Confine spill by diking or impoundment. Remove sources of heat or ignition. Clean-up spill but do not flush to sewer or surface water. Ventilate area and avoid breathing vapors or mists.

**Small Spills:** Stop spill at source if possible. Isolate and confine by diking, or similar method. Remove discharged material.

**Large Spills:**

**Containment:** For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways.

**Cleanup:** Mix with inert absorbent material such as soil, sand, or oil dry, to stabilize.

**Regulatory Requirements:** Notify local health and pollution control agencies as appropriate. Follow applicable OSHA regulations (29 CFR 1900.120). This material is not a hazardous waste as defined in RCRA. For disposal follow all federal, state, and local regulations regarding solid waste.

### Section 7 – Handling and Storage

**Handling Precautions:** Use appropriate PPE (see section 8). Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Empty containers retain residue. Do not reuse containers. Do not sand final product once hardened: contains quartz.

**Storage Requirements:** Store in original container protected from direct sunlight in a dry, cool, well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep containers tightly closed and sealed. Do not store in unlabeled containers.

**Regulatory Requirements:** None known.

### Section 8 – Exposure Controls / Personal Protection

**Engineering Controls:** Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Ventilation:** Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs if established (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

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**Respiratory Protection:** Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH -approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. **Use self-contained, positive-pressure, breathing apparatus (SCBA) when this product is used in a confined or enclosed space and exposure limits are exceeded or hydrogen sulfide concentration is unknown or exceeds 20 ppm. Organic vapor respirators may be used with good ventilation when organic vapors are less than 1000 ppm or ten times permissible exposure limit, whichever is less. For emergency or non-routine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA until it is determined that a hazardous atmosphere and/or oxygen deficient atmosphere is NOT PRESENT. Warning! air-purifying respirators do not protect workers in oxygen-deficient atmospheres.** If respirators are used, OSHA requires a written respiratory protection program that includes: procedures for selecting respirators; medical evaluation; fit testing; use in routine and emergency situations; cleaning, disinfecting, storing, inspecting, repairing, discarding and maintaining respirators; adequate air quality, quantity and flow; training in respiratory hazards; training in use of respirators; and an evaluation of the effectiveness of the respiratory program.

**Protective Clothing/Equipment:** Wear protective gloves, boots, aprons, and gauntlets as need to prevent skin contact. Goggles and face shields should be used in areas where splashing may occur. Wear protective eyeglasses or safety goggles per OSHA eye- and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

**Safety Stations:** Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

**Contaminated Equipment:** Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

**Comments:** Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, or smoking.

### Section 9 – Physical and Chemical Properties

**Physical State:** Heavy Liquid

**Appearance and Odor:** Light grey color with slight odor

**Odor Threshold:** No data

**Vapor Pressure:** Not Determined

**Vapor Density (Air = 1):** NA

**Specific Gravity (H<sub>2</sub>O = 1, at 4°C):** 1.8

**pH:** NA

**Water Solubility:** Insoluble

**Other Solubilities:** Ketones, Ethers

**Boiling Point:** >212°F

**Freezing/Melting Point:** No data.

**Viscosity:** 1.2 million cps

**% Volatile:** Nil

**Evaporation Rate:** Not Determined

### Section 10 – Stability and Reactivity

**Stability:** Stable at room temperature in closed containers under normal storage and handling conditions.

**Polymerization:** Hazardous polymerization cannot occur.

**Chemical Incompatibilities:** Strong oxidizing agents, acids, bases, amines

**Conditions to Avoid:** Do not store near open flame. Do not freeze.

**Hazardous Decomposition Products:** Primary decomposition products are carbon monoxide and carbon dioxide.

### Section 11 – Toxicological Information

**Eye Effects:** Vapors may cause a slight smarting of the eyes or respiratory system if present in high concentrations. The effect is temporary.

**Acute Inhalation Effects:** Human, inhalation, TC<sub>LO</sub>: No data.

**Carcinogenicity:** Carbon black is classified as a carcinogen when in respirable form.

**Teratogenicity:** No data.

**Chronic Effects:** Prolonged and repeated skin contact may cause dermatitis, photosensitization, and melanosis.

**Skin Effects:** Causes smarting of the skin and first-degree burns on short exposure; may cause secondary burns on long exposure.

**Acute Oral Effects:** Rat, oral, LD<sub>50</sub>: 30,000 mg/kg

**Mutagenicity:** No data.

### Section 12 – Ecological Information

**Ecotoxicity:** Toxic to aquatic organisms: LC50 between 1 and 10 mg/L (Epichlorohydrin)

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### Environmental Fate:

**Environmental Transport:** No data.  
**Environmental Degradation:** No data.  
**Soil Absorption/Mobility:** No data.

## Section 13 – Disposal Considerations

**Disposal:** Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, state, and local regulations.

**Disposal Regulatory Requirements:** Solidified waste material should not be a hazardous waste under RCRA guidelines. Follow Federal, state, and local regulations for disposal of solid waste.

**Container Cleaning and Disposal:** Recommend using a non-hazardous solvent to remove the product. Follow Federal, state, and local regulations for disposal of the waste material, regardless of its waste classification.

## Section 14 – Transport Information

**Shipping Name:** Not regulated

### Packaging

#### Authorizations:

a) Exceptions:

b) Non-bulk

#### Packaging:

c) Bulk Packaging:

#### Above RQ Shipping

#### Description:

### Quantity Limitations:

a) Passenger, Aircraft, or  
Railcar: No limit

b) Cargo Aircraft Only: No limit

### Vessel Stowage Requirements:

a) Vessel Stowage:

b) Other: Marking:

Shipments by vessel below RQ:

Shipments by vessel above RQ:

**Hazard Class:**

**ID No.:**

**Packing Group:**

**Label:**

**RQ:**

**Special Provisions (172.102):**

## Section 15 – Regulatory Information

### EPA Regulations:

#### RCRA

RCRA Hazardous Waste Number: Not listed.

RCRA Hazardous Waste Classification (40 CFR 261): This material should not be hazardous due to characteristics.

#### CERCLA

CERCLA: Not listed.

CERCLA Reportable Quantity (RQ):

#### SARA

SARA 311/312 Codes: Fire–No, Pressure–No, Reactivity–No, Immediate (acute)–Yes, Delayed (chronic)–Yes.

SARA Toxic Chemical: Not listed.

SARA EHS (Extremely Hazardous Substance) (40 CFR 355): Not listed.

### OSHA Regulations

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): See Table in Section 2.

OSHA Specifically Regulated Substance: No

**State Regulations:** California Prop 65: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm. (Carbon Black)

## Section 16 – Other Information

### Revision Notes:

#### Additional Hazard Rating Systems:

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