



## Armorcoat CR Part A Resin

### SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

**GHS product identifier:** VSC Armorcoat CR, Part A

**Other means of identification:** Epoxy Resin

**Recommended use of the chemical and restrictions on use:** N/A

**Supplier's details:** VANBERG SPECIALIZED COATINGS  
10705 COTTONWOOD ST.  
LENEXA, KS 66215  
INFORMATION PHONE NUMBER: 913-599-5939

**Emergency phone number:** 1-800-255-3924

### SECTION 2 – HAZARDS IDENTIFICATION

#### Classification of the substance or mixture:

Skin Corrosion/Irritation 2, Eye Damage/Irritation 2B, Acute Toxicity – Oral 4

#### GHS label elements:



**Signal Word:** Warning

**Hazard Statement:** Causes skin irritation.

**Prevention:** Wash hands thoroughly after handling. Wear protective gloves.

**Response:** If on skin: wash with plenty of soap and water. If skin irritation occurs: get medical advice/attention. Take off contaminated clothing and wash before reuse.



**Signal Word:** Warning

**Hazard Statement:** Causes eye irritation

**Prevention:** Flush eyes thoroughly after eye contact.

**Response:** 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.



**Signal Word:** Warning

**Hazard Statement:** Harmful if swallowed

**Prevention:** Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.

**Response:** If swallowed: Call a poison center or doctor/physician if you feel unwell. Rinse mouth.

**Disposal:** Dispose of in accordance with federal, state, and local regulations.

#### Other hazards which do not result in classification

NA

#### Hazards Material Information System (United States):

<b>Health</b>	<b>2</b>
<b>Flammability</b>	<b>1</b>
<b>Physical Hazard</b>	<b>0</b>

Hazard Codes: Minimal Hazard, 1=Slight Hazard, 2=Moderate Hazard, 3=Serious Hazard, 4= Severe Hazard

### SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

#### Mixtures:

Hazardous Components (Chemical Name)	CAS #	Concentration
Epoxy phenol novolac resin	28064-14-4	100%

### SECTION 4 – FIRST AID MEASURES

#### Description of necessary first-aid measures:

##### Eye Contact:

Remove contact lenses at once. Immediately flush eyes with large amounts of water or normal saline for at least 30 minutes. Hold eyelids apart while flushing to rinse entire surface of eye and lids with water. Prompt medical attention is essential.

##### Skin Contact:

Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician if irritation persists. Wash clothing before reuse. Contaminated leather articles, including shoes, cannot be decontaminated and should be destroyed to prevent reuse.

##### Inhalation:

Remove to fresh air if effects occur. If not breathing, give artificial respiration. Get immediate medical attention.

##### Ingestion:

Do not induce vomiting. Get immediate medical attention. Never give anything by mouth to an unconscious or convulsing person.

#### Most Important symptoms/effects, acute and delayed:

##### Signs and Symptoms:

Irritation as noted above. Skin sensitization (allergy) may be evidenced by rashes, especially hives.

##### Aggravated Medical Conditions:

Preexisting skin and eye disorders may be aggravated by exposure to this product. Preexisting skin and lung allergies may increase the chance of developing increased allergy symptoms from exposure to this product.

##### Other Health Effects:

Based on animal studies, repeated exposure to components of this product may cause damage to liver, kidney, and respiratory systems. Reports have associated repeated and prolonged occupational exposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling vapors may be harmful or fatal.

##### Indication of immediate medical attention and special treatment needed, if necessary:

Note to Physician: No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient. Contact a poison control center for additional treatment information.

### SECTION 5 – FIRE FIGHTING MEASURES

#### Suitable extinguishing media:

Use alcohol type foam, dry chemical, or CO<sub>2</sub>.

#### Specific hazards arising from the chemical:

Material will not burn unless preheated.

#### Special protective actions for fire-fighters:

Use water spray to cool fire exposed surfaces and to protect personnel. If a leak or spill has not ignited, use water spray to disperse the vapors. Contain the runoff stream. Try to cover liquid spills with foam. Do not enter confined fire space without full bunker gear (helmet with face shield, bunker coats, gloves, and rubber boots), including a positive pressure NIOSH approved self-contained breathing apparatus.

### SECTION 6 – ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures:

Ventilate the area. Avoid breathing vapor. Use self-contained breathing apparatus or supplied air for large spills or confined areas.

#### Methods and materials for containment and clean up:

Contain spill if possible. Wipe up or absorb on suitable material and pick up with shovels. Do not use sawdust, wood chips, or other cellulosic materials to absorb the spill. Prevent entry into sewers and waterways. Dispose of in accordance with federal, state, and local regulations.

## SECTION 7 – HANDLING AND STORAGE

### Precautions for safe handling:

Ground all transfer equipment. Take precautionary measures against static discharge. Handle as an industrial chemical.

### Conditions for safe storage, including any incompatibilities:

Keep container tightly closed when not in use. Practice good caution and personal cleanliness to avoid skin and eye contact. Hold bulk storage under nitrogen blanket. Store in a cool, dry place with adequate ventilation. Keep away from open flames and high temperatures.

## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters:

Hazardous Components (Chemical Name)	CAS #	PERCENT	EXPOSURE LIMITS	SOURCE
Epoxy phenol novolac resin	28064-14-4	100%	None Established	N/A

### Appropriate engineering controls:

N/A

### Individual protection measures, such as personal protective equipment:

#### Respiratory Protection:

Provide adequate ventilation. Avoid breathing of vapors or mists. Airborne concentrations should be kept to lowest levels possible. When exposures are not adequately controlled, use an approved respirator. Selection of air-purifying or positive-pressure supplied air will depend on the specific operation and the potential airborne concentration of the material. For emergency conditions, use an approved positive pressure self-contained breathing apparatus.

#### Protective Clothing:

Protective clothing such as uniforms, coveralls, or lab coats must be worn. Launder or dry-clean when soiled. Gloves and goggles resistant to chemicals and petroleum distillates required. When handling large quantities, impervious suits, gloves, and rubber boots must be worn.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

**Appearance (physical state, color, etc.):** yellowish liquid

**Odor:** Mild odor

**Odor threshold:** N/A

**pH:** Not determined.

**Melting point/freezing point:** may solidify < -15° C

**Initial boiling point and boiling range:** N/A

**Flash Point:** 495° F (PMCC)

**Evaporation rate:** N/A

**Flammability (solid, gas):** N/A

**Upper/lower flammability or explosive limits:** N/A

**Vapor pressure:** Negligible

**Vapor Density:** > 1

**Relative density (specific gravity):** 1.19

**Solubility(ies):** Negligible (water)

**Partition coefficient; n-octanol/water:** N/A

**Auto-ignition temperature:** N/A

**Decomposition temperature:** N/A

**Viscosity:** N/A

## SECTION 10 – STABILITY AND REACTIVITY

### Reactivity:

N/A

### Chemical stability:

Excess heating over long periods of time degrades the resin.

**Possibility of hazardous reactions:**

Will not occur by itself, but masses of more than 1 pound of product plus an aliphatic amine will cause irreversible polymerization with considerable heat buildup.

**Conditions to avoid:**

Avoid exposure to heat, light, flame, or other sources of ignition.

**Incompatible materials:**

Can react vigorously with strong oxidizing agents, strong lewis or mineral acids, and strong mineral and organic bases/especially primary and secondary amines. Reaction with some curing agents may produce considerable heat.

**Hazardous decomposition products:**

Hazardous combustion products may include intense heat, dense black smoke, carbon monoxide, carbon dioxide, aldehydes, acids, phenolics, water, and hydrocarbon fragments.

## SECTION 11 – TOXICOLOGICAL INFORMATION

**Likely routes of exposure:**

N/A

**Symptoms related to the physical, chemical and toxicological characteristics:****Eye Contact:**

Irritating and will injure eye tissue if not removed promptly.

**Skin Contact:**

May cause severe irritation. Has been known to cause allergic skin reaction in humans.

**Inhalation:**

High vapor concentrations are irritating to the eyes and respiratory tract, may cause headaches and dizziness, are anesthetic, and may have other central nervous system effects.

**Ingestion:**

May be slightly toxic and may be harmful if swallowed.

**Delayed and immediate effects and also chronic effects from short and long term exposure:**

N/A

**Numerical measures of toxicity:**

INGREDIENT NAME	CAS #	%	ACUTE ORAL LD50	ACUTE DERMAL LD50	ACUTE INHALATION LC50
Epoxy phenol novolac resin	28064-14-4	100	> 2000 mg/kg	> 2000 mg/kg	Not available

## SECTION 12 – ECOLOGICAL INFORMATION

**Ecotoxicity:**

N/A

**Persistence and degradability:**

N/A

**Bioaccumulative potential:**

N/A

**Mobility in soil:**

N/A

**Other adverse effects:**

N/A

## SECTION 13 – DISPOSAL CONSIDERATIONS

**Disposal methods:**

Dispose of in accordance with federal, state, and local regulations.

## SECTION 14 – TRANSPORTATION INFORMATION

**UN number:**

Not regulated

**UN proper shipping name:**

N/A

**Transport hazard class(es):**

N/A

**Packing group, if applicable:**

N/A

**Environmental hazards:**

N/A

**Transport in bulk:**

N/A

**Special precautions for user:**

N/A

## SECTION 15 – REGULATORY INFORMATION

**Safety, health and environmental regulations:**

Not meant to be all-inclusive. Selected regulations presented.

**SARA Title III Section 311/312 hazards:** Acute Health Hazard

**WHMIS Classification:**

**TSCA Status:** listed on TSCA Inventory

**OSHA Hazard Comm. Std.:** See Section 2

CA = California Haz. Subst. List; CA65 = California Safe Drinking Water and Toxics Enforcement Act List; CT = Connecticut Tox. Subst. List; FL = Florida Subst. List; IL = Illinois Tox. Subst. List; LA = Louisiana Haz. Subst. List; MA = Massachusetts Subst. List; ME = Maine Haz. Subst. List; MN = Minnesota Haz. Subst. List; NJ = New Jersey Haz. Subst. List; PA = Pennsylvania Haz. Subst. List; RI = Rhode Island Haz. Subst. List.

## SECTION 16 – OTHER INFORMATION

**Date of Preparation:** 05/17/2016

To the best of our knowledge, the information contained herein is accurate. Final determination of the suitability of any material is the sole responsibility of the users. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein; we cannot guarantee that these are the only hazards which exist.