Safety Data Sheet

RCC Corrosion Control / SDS #: RCC-20266 / Revision Date: 05/23/2022

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: COROFLAKE 266 EN RESIN Various Colors

Chemical Family: Novolac Epoxy Resin

Product Use: Polymer Coating

Restrictions on Use: Use as directed by manufacturer

Manufacturer: RCC Corrosion Control
1450 Hoff Industrial Drive
O'Fallon, MO 63366
Phone: 636-697-4659

24-Hour Emergency Phone Number: North America: 800-424-9300 (CHEMTREC)
International: 703-527-3887 (CHEMTREC) Collect Calls Accepted

2. HAZARDS IDENTIFICATION

GHS Classifications

Health Hazards
Skin Irritation, Category 2
Eye Irritation, Category 2A
Respiratory Sensitization, Category 1B
Skin Sensitization, Category 1B
Carcinogenicity, Category 2
Reproductive Toxicity, Category 2
Specific Target Organ Systematic Toxicity, Single Exposure, Category 3, Respiratory Tract Irritation [Inhalation, Ingestion, Skin absorption]

Environmental Hazards
Acute Aquatic Toxicity, Category 2
Chronic Aquatic Toxicity, Category 2

GHS Labeling
Pictograms:

Signal Word: Warning!

Hazard Statements
H315: Causes skin irritation
H319: Causes serious eye irritation
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335: May cause respiratory irritation
H351: Suspected of causing cancer
H373: May cause damage to organs prolonged or repeated exposure
H401: Toxic to aquatic life
H411: Toxic to aquatic life with long lasting effects

Precautionary Statements
Prevention:
P202: Do not handle until all safety precautions have been read and understood.
P233: Keep container tightly closed.
P260: Do not breathe vapors.
P264: Wash hands and exposed areas thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P271: Use only outdoors or in a well-ventilated area.
P272: Contaminated work clothing should not be allowed out of the workplace
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P285: In case of inadequate ventilation wear respiratory protection.

Response:
P302 + P352: IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 + P341: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P314: Get medical advice/attention if you feel unwell.
P333 + P313: If skin irritation or rash occurs: Get medical advice/attention.
P337 + P313: If eye irritation persists: Get medical advice/attention.
P342 + P311: If respiratory symptoms persist: Call a POISON CENTER or doctor/physician.
P362: Take off contaminated clothing and wash before reuse.

P391: Collect spillage.

Storage:
P403 + P233: Store in a well-ventilated place. Keep container tightly closed.
P405: Store locked up.

Disposal:
P501: Dispose of contents/container in accordance with local, regional, and federal regulations

3. COMPOSITION/ INFORMATION ON INGREDIENTS

Chemical characterization
Novolac Epoxy Resin

Component*	CAS #	Weight %
Phenol-formaldehyde polymer, glycidyl ether	28064-14-4	60 - 75
1,4-Butanediol Diglycidyl Ether	2425-79-8	5 - 10
Titanium Dioxide	13463-67-7	5 - 10
4,4-Isopropylidenediphenol-Epichlorohydrin Copolymer	25068-38-6	1 - 5
Silicon Dioxide	7631-86-9	1 - 3

4. FIRST AID MEASURES

Inhalation
Symptoms & Effects: Nose, throat and lung irritation, respiratory tract burns and irritation
Measures: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, administer oxygen. Mouth-to-mouth resuscitation is not recommended as it may be dangerous to the person providing aid. If victim feels unwell, seek medical attention.

Skin Contact
Symptoms & Effects: Skin irritation, redness, burning sensation, drying of the skin, allergic skin reactions
Measures: Immediately wash skin with soap and plenty of water for at least 15 minutes. Remove contaminated clothing and shoes while washing. If skin irritation or rash occurs, seek medical advice/attention. Wash contaminated clothing before reuse.

Eye Contact
Symptoms & Effects: Eye irritation, stinging, tearing, redness, and swelling of the eyes
Measures: Immediately rinse eyes with water for at least 15 minutes. Remove contact lenses after the initial few minutes and if easy to do so and continue rinsing. Rinse beneath eyelids by holding eyelids apart with clean fingers while rinsing. Seek immediate medical attention.

Ingestion

Symptoms & Effects: Stomach or intestinal irritation, nausea, irritation of the throat, dizziness, drowsiness
Measures: Seek immediate medical attention. If individual is drowsy or unconscious, have the individual lie down on their left side with their head down. Do not give individual anything by mouth. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. Do not leave individual unattended.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Dry chemical, Carbon dioxide, Water spray or mist, Alcohol Foam

Unsuitable Extinguishing Media: Water jet

Hazardous Combustion Products: Carbon monoxide, Carbon dioxide

Protective Equipment for Fire-Fighters: Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA).

Precautions for Fire-Fighters: Fine dust clouds may form explosive mixtures with air. Organic powders when finely divided over a range of concentrations regardless of particle size or shape and suspended in air or some other oxidizing medium may form explosive dust-air mixtures and result in a fire or dust explosion. When processed with flammable liquids/vapors/mists, ignitable mixtures may be formed with dusts.

6. ACCIDENTAL RELEASE MEASURES

Protective Equipment: Recommended to wear chemical splash goggles & resistant gloves and discard of gloves that show tears, pinholes, or signs of wear. Wear proper garments to prevent skin exposure, such as long-sleeves and pants.

Personal Precautions: Persons not wearing proper PPE should be excluded from the area of contamination until clean-up has been completed. Ensure adequate ventilation. Pay close attention to the spreading of gases, especially at ground level.
Environmental Precautions: Do not allow discharge into drains, surface waters, or sanitary sewer system. Prevent spreading over a wide area by containment or oil barriers. Local authorities should be advised if significant spillages cannot be contained or if material discharges into drains or ground water.

Methods & Materials for Clean-Up: Collect spillage with spark-proof tools and explosion-proof equipment. Contain and collect spillage with non-combustible absorbent material such as vermiculite, sodium bicarbonate, sodium carbonate, calcium carbonate, clean sand or non-acidic clay and then dampen the mixture with water. Sweep or scoop up using non-sparking tools and place into suitable containers for prompt disposal according to proper federal, state, and local regulations. Remove residual material with water.

7. HANDLING AND STORAGE

Handling: Personal protective equipment should be worn at all times when handling this material. Do not ingest, inhale, or expose eyes and skin to this product. Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations. Do not cut, puncture, or weld on or near the container. Avoid breathing vapors and/or aerosols. Use only in well-ventilated areas. When using, do not eat, drink or smoke. Persons with a history of skin sensitization or respiratory sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Prevent dust accumulation. Wear appropriate respiratory equipment if ventilation is inadequate.

Storage: Do not store near intense heat, open flames, or other sources of ignition. Store in a well-ventilated place, and keep container tightly closed. Store container away from direct sunlight. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Incompatible Materials: Acids, Oxidizing agents

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits :
Exposure limits have not been established for this product.

Titanium Dioxide	**CAS # 13463-67-7**	
OSHA	Permissible Exposure Limit (PEL)	15 mg/m^3
ACGIH	Time weighted average (TWA)	10 mg/m^3

Engineering Controls: Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below permissible exposure limits. Provide readily accessible eye wash stations and safety showers.

Occupational Exposure Controls: Ensure adequate ventilation, especially in confined areas. Consider all potential hazards of this material, applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting PPE. Ensure that eyewash stations and safety showers are proximal to the work location. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Protective and Hygiene measures: Wash hands before breaks and immediately after handling product. When using, do not eat, drink, or smoke. In case of clothes contamination, remove and wash contaminated clothing before re-use. Discard of contaminated leather articles.

Eye Protection: Recommended to wear chemical splash goggles at all times when using this product. Have a suitable eye wash station or bottle nearby in case of splashing into the eyes.

Hand Protection: Recommended to wear suitable resistant gloves and discard of gloves that show tears, pinholes, or signs of wear. Suitable gloves will be based on product use and the period of use, and may include neoprene, butyl-rubber, nitrile rubber, etc.

Skin Protection: Recommended to wear impervious clothing, such as a full rubber suit, rubber or plastic boots, a slicker suit, and/or long-sleeved clothing, pants and proper foot covering in order to prevent direct skin contact with the product. If skin irritation develops, contact your facility health and safety professional or your local safety equipment supplier to determine the proper personal protective equipment for your use.

Respiratory Protection: A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be appropriate under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Varied Colored liquid
Odor: Mild
Odor threshold: No data available
pH: No data available
Melting/freezing point: No data available
Boiling point: > 390°F (200°C)
Boiling range: No data available
Flash point (Tag closed cup): > 212°F (100°C)
Evaporation rate: No data available
Flammability: Lower Limit: No data available **Upper Limit:** No data available
Vapor pressure: No data available
Relative vapor density: No data available
Density: 1.2 g/cm^3 (10 lb/gal)
Solubility in water: Insoluble
Partition coefficient (n-octanol/water): No data available
Auto-ignition temperature: 570°F (300°C)
Decomposition temperature: No data available
Viscosity (dynamic): No data available

10. STABILITY AND REACTIVITY

Reactivity: No decomposition if stored and applied as directed.

Chemical Stability: Stable under normal conditions.

Possibility of Hazardous Reactions: Hazardous reactions and polymerization should not occur if stored and used as directed.

Conditions to Avoid: Excessive heat, Sparks, Flames, Other ignition sources

Incompatible Materials: Acids, Oxidizing agents

Hazardous decomposition products: Carbon monoxide, Carbon dioxide

11. TOXICOLOGICAL INFORMATION

Primary Routes of Exposure: Inhalation, Skin absorption, Eye contact, Ingestion

Symptoms Related to Physical, Chemical and Toxicological Characteristics: Nose, throat and lung irritation, respiratory tract burns and irritation, skin irritation, redness, burning sensation, drying of the skin, allergic skin reactions, eye irritation, stinging, tearing, redness, and swelling of the eyes, stomach or intestinal irritation, nausea, irritation of the throat, dizziness, drowsiness

Delayed and Immediate Effects & Chronic Effects from Exposure: This product may cause respiratory sensitization or may cause allergy or asthma symptoms as well as breathing difficulties if inhaled. This product may cause skin sensitization or allergic skin breakouts or reactions. This product is a potential carcinogen as outlined by OSHA and IARC (see below). Based on data form laboratory experiments, this product may harm fertility or the unborn child. This product may harm the respiratory tract with prolonged or repeated exposure.

Measures of Toxicity:
Acute toxicities are calculated based on component toxicities
Mixture: Acute Oral Toxicity: No sufficient data available
Acute Dermal Toxicity: No sufficient data available
Acute Inhalation Toxicity: No sufficient data available

1,4-Butanediol Diglycidyl Ether	**CAS # 2425-79-8**
Acute Oral Toxicity	LD_{50} Rat: 1,410 mg/kg
Acute Dermal Toxicity	LD_{50} Rabbit: > 2,150 mg/kg
Titanium Dioxide	**CAS # 13463-67-7**
Acute Oral Toxicity	LD_{50} Rat: > 5,000 mg/kg
Acute Inhalation Toxicity	LC_{50} Rat: > 6.8 mg/l
4,4-Isopropylidenediphenol-Epichlorohydrin Copolymer	**CAS # 25068-38-6**
Acute Oral Toxicity	LD_{50} Rat: 11,400 mg/kg
Acute Dermal Toxicity	LD_{50} Rat: > 2,000 mg/kg
Silicon Dioxide	**CAS # 7631-86-9**
Acute Oral Toxicity	LD_{50} Rat: 3,160 mg/kg

Carcinogen Claims: (titanium dioxide)
OSHA: **Yes; 2,** International Agency for Research on Cancer (IARC): **Yes; 2A [Probably Carcinogenic]**
ACGIH: **No; A4 [Not Classifiable],** National Toxicology Program (NTP) Report on Carcinogens: **No**

12. ECOLOGICAL INFORMATION

Ecotoxicity: This substance is toxic to aquatic organisms with long lasting effects. It is strongly advised that this substance does not enter the environment. Local authorities should be advised if significant spillages cannot be contained or if material discharges into drains or ground water.

1,4-Butanediol Diglycidyl Ether	**CAS # 2425-79-8**
Toxicity to Fish	LC_{50} – 18 mg/l (Zebra fish; 96 h)
Toxicity to Daphnia	EC_{50} – 75 mg/l (Water flea; 48h)

Titanium Dioxide	**CAS # 13463-67-7**
Toxicity to Daphnia	EC_{50} – 1,000 mg/l (Water flea; 48 h)

Persistence & Degradability: This product is not readily biodegradable.
Bio-accumulative Potential: No data available
Mobility in Soil: No data available
Other Adverse Effects: No data available

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with Federal, State or Local regulations.
Contaminated packaging should be emptied as far as possible before disposal.

14. TRANSPORT INFORMATION

DOT SHIPPING CLASSIFICATION:
UN NUMBER: UN3082
PROPER SHIPPING NAME: Environmentally Hazardous Substance, liquid, n.o.s. (Epoxy Resin)
TRANSPORTATION HAZARD CLASS: 9
PACKING GROUP: III
HAZARD LABEL: 9
IMDG (Marine) SHIPPING CLASSIFICATION:
IMDG CODE: 9
UN NUMBER: UN3082
MARINE POLLUTANT: Yes
EmS: F-A; S-F
IMDG PACKING GROUP: III
HAZARD LABEL: 9
Description of the goods
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN)

IATA (Air) SHIPPING CLASSIFICATION:
ICAO/IATA-DGR: 9
UN NUMBER: UN3082
HAZARD LABEL: 9

Description of the goods
Environmentally Hazardous Substance, liquid, n.o.s. (Epoxy Resin)

15. REGULATORY INFORMATION

All components of this product conform to the following national inventory requirements: US TSCA, EU EINECS and Canada DSL

SARA Title III

Section 302 – Extremely Hazardous Chemicals
The following ingredients are subject to the supplier notification requirements of Section 302 of the Superfund Amendments and Reauthorization Act (SARA/EPCRA) and the requirements of 40 CFR Part 37
None Listed

Section 313 – Toxic Chemicals
The following ingredients are subject to the supplier notification requirements of Section 313 of the Superfund Amendments and Reauthorization Act (SARA/EPCRA) and the requirements of 40 CFR Part 37 *None Listed*

OTHER FEDERAL REGULATIONS

Components of this product are subject to RCRA Hazardous Waste requirements.
Clean Air Act (CAA) Hazardous Air Pollutants requirements and OSHA Process Safety Management (PSM) high hazard requirements.

CANADIAN REGULATIONS

Same as OSHA GHS Classification

STATE REGULATIONS

California Proposition 65
This product does not contain chemicals known to the state of California to cause cancer, birth defects, and other reproductive harm.

Other State Regulations
The components of this product may be included on the various state hazardous materials lists noted below.

California Hazardous Substances List/Permissible Exposure List
California Toxic air contaminants
Connecticut Permissible Exposure Limits
Delaware List of Chemicals and RQs
Hawaii Permissible Exposure Limits
Idaho Toxic Air Pollutants
Illinois Toxic Air Contaminants List
Louisiana Toxic Air Pollutants

Maine Hazardous Air Pollutants
Maryland Toxic Air Pollutants for Existing Sources
Massachusetts Hazardous Substances List
Michigan Permissible Exposure Limits
Minnesota Hazardous Substances
Minnesota Permissible Exposure Limits
Nebraska Hazardous Air Pollutants
New Jersey RTK Hazardous Substances List/TCPA Extremely Hazardous Substances List
New York List of Hazardous Substances
Ohio Toxic Air Contaminants
Oklahoma Toxic Air Contaminants
North Carolina TAP Emissions Rates Requiring a Permit
Pennsylvania Hazardous Substances List
Rhode Island Toxic Air Contaminants
Tennessee Permissible Exposure Limits
Vermont Hazardous Air Contaminants/Permissible Exposure Limits
Washington Permissible Exposure Limits for Airborne Contaminants.
West Virginia Toxic Air Pollutant List
Wisconsin hazardous Air Contaminants

Note: Entries under Section 15 are not intended to be all inclusive of Federal and State laws and regulations. Please consult the appropriate agencies for further clarification of any requirements.

16. OTHER INFORMATION

Disclaimer: The information provided in this Material 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.