Safety Data Sheet

RCC Corrosion Control / SDS #: RCC-23005 / Revision Date: 05/23/2022

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: COROJOINT 5 PRIMER

Chemical Family: Isocyanate Solution

Product Use: Coating material

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. HAZARD IDENTIFICATION

GHS Classifications

Health Hazards
Acute Toxicity, Inhalation, Category 2
Skin Irritation, Category 2
Eye Irritation, Category 2A
Respiratory Sensitization, Category 1A
Skin Sensitization, Category 1A
Specific Target Organ Systemic Toxicity, Single Exposure, Category 3, Respiratory Tract [Inhalation]

GHS-Labeling
Pictograms:

Signal Word: Danger!

Hazard Statements
H315: Causes skin irritation
H317: May cause an allergic skin reaction
H319: Causes serious eye irritation
H330: Fatal if inhaled
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335: May cause respiratory irritation
H371: May cause damage to organs

Precautionary Statements
Prevention:
P233: Keep container tightly closed.
P260: Do not breathe vapors.
P264: Wash skin and exposed areas thoroughly after handling.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:
P302 + P352: IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 + P341+P310: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician
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.
P362: Take off contaminated clothing and wash before reuse.

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

Component*	CAS #	% By Wt.
Diphenylmethane Diisocyanate Prepolymer	53862-89-8	45 - 60
Diphenylmethane-4,4'-di-isocyanate (MDI)	101-68-8	10 - 30
Propylene Carbonate	108-32-2	10 - 30
Isocyanic Acid, Polymethylenepolyphenylene Ester	9016-87-9	5 - 15
Diphenylmethane-2,4'-di-isocyanate (MDI)	5873-54-1	5 - 15

4. FIRST AID MEASURES

Inhalation
Symptoms & Effects: Nausea, nose and throat irritation, headache, respiratory tract irritation, breathing difficulties, allergy or asthma symptoms
Measures: Immediately remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing has stopped, begin artificial respiration. If breathing is difficult, administer oxygen. Seek immediate medical attention.

Skin Contact
Symptoms & Effects: Skin irritation, redness, allergic reactions, skin drying
Measures: Wash skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes while washing. Wash contaminated clothing before reuse. If skin irritation persists, seek medical attention.

Eye Contact
Symptoms & Effects: Eye irritation, stinging, tearing, redness, eye swelling
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 resume 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, vomiting, diarrhea, respiratory tract irritation
Measures: Seek immediate medical attention. Do NOT induce vomiting unless directed to do so by a physician or medical personnel. If the victim is drowsy or unconscious, do not give anything by mouth. Do not give milk. Place individual on their left side and place their head down. Do not leave victim unattended.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Alcohol-resistant foam, Carbon dioxide, Dry chemical, Water spray

Unsuitable Extinguishing Media: Water stream/jet

Hazardous Combustion Products: Hydrogen cyanide (HCN), Nitrogen oxides (NO_x), 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: Water stream may be ineffective for extinguishment unless used under favorable conditions. This product is volatile and readily gives off flammable vapors which may travel along the ground or be moved by ventilation. Do not allow run-off from firefighting to enter drains or water courses. Use water spray to cool fully closed containers. Avoid spreading burning liquid with water used for cooling purposes.

6. ACCIDENTAL RELEASE MEASURES

Protective Equipment: Recommended to wear NIOSH approved respiratory apparatus, 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. Eliminate all ignition sources and pay 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 constructing a dike or using 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: Immediately evacuate the spill area and provide maximum ventilation. Only personnel equipped with proper respiratory, eye, and skin protection should be permitted in the area. Contain spilled material with inert, non-combustible absorbent materials such as sand, earth, diatomaceous earth, or vermiculite. Transfer to a suitable container for disposal according to proper federal, state, and local regulations. Notify the proper response units and agencies for any uncontained releases or spills.

7. HANDLING AND STORAGE

Handling: Avoid breathing vapors or mists of this product. Avoid eye and skin contact with this material. Skin and eye PPE should be worn at all times when handling this product. When adequate ventilation is not provided, respiratory PPE should also be used. Hands and other exposed areas should be washed thoroughly with soap and water after contact, especially before eating and/or smoking. Do not eat, drink or smoke when using this product.

Storage: Store in a cool, dry, ventilated area, away from heat and ignition sources as well as from incompatible materials (see below). Keep container tightly closed and store locked up. Keep away from food, drink, and animal foodstuffs.

Incompatible Materials: Water, Alkaline metals, Amines, Alcohols, Strong acids, Strong bases, Strong oxidizing agents, Aluminum, Magnesium, Vinyl compounds

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits :

Diphenylmethane-4,4'-di-isocyanate	**CAS # 101-68-8**	
OSHA	Permissible Exposure Limit (STEL)	0.02 ppm (0.2 mg/m^3)
ACGIH	Time Weighted Average (TWA)	0.005 ppm (0.05 mg/m^3)
NIOSH	Recommended Exposure Limit (TWA/STEL)	0.005 ppm/0.02 ppm)

Engineering Controls: Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposures 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: Do not inhale vapors. 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.

Eye Protection: Recommended to wear tight fitting, chemical splash goggles when there is potential for the exposure of the eyes to the liquid, vapor or mist. 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 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: Amber Liquid
Odor: No data available
Odor Threshold: No data available
pH: No data available
Melting/Freezing point: No data available
Boiling Point/ Range: > 570°F (> 300°C)
Flash point (Tag closed cup): > 230°F (> 110°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: 8.5 (Air = 1)
Density: 1.16 g/cm^3 (9.65 lbs/gal) @ 68°F (20°C)
Solubility in water: No data available
Partition coefficient (n-octanol/water): No data available
Auto-ignition temperature: > 1,100°F (> 600°C)
Ignition temperature: No data available
Decomposition temperature: No data available
Viscosity (dynamic): 400 – 450 cps

10. STABILITY AND REACTIVITY

Reactivity: No decomposition if stored and applied as directed.

Chemical Stability: Stable under normal conditions.
Possibility of Hazardous Reactions: Product will not undergo hazardous polymerization or other hazardous reactions if storage and use directions are followed.

Conditions to Avoid: Exposure to water, Elevated temperatures, Incompatible materials (see below)

Incompatible Materials: Water, Alkaline metals, Amines, Alcohols, Strong acids, Strong bases, Strong oxidizing agents, Aluminum, Magnesium, Vinyl compounds

Hazardous decomposition products: Hydrogen cyanide (HCN), Nitrogen oxides (NO_x), Carbon monoxide, Carbon dioxide

11. TOXICOLOGICAL INFORMATION

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

Symptoms Related to Physical, Chemical and Toxicological Characteristics: Nausea, nose and throat irritation, headache, respiratory tract irritation, breathing difficulties, allergy or asthma symptoms, skin irritation, skin redness, allergic reactions, skin drying, eye irritation, stinging, tearing, eye redness, eye swelling, stomach or intestinal irritation, vomiting, diarrhea

Delayed and Immediate Effects & Chronic Effects from Exposure: This substance may result in respiratory irritation, asthma symptoms or breathing difficulties on inhalation. This substance may lead to allergic skin reactions or skin breakouts. With repeated exposure, the substance may have toxic effects on the lungs and respiratory tract. This substance is not a suspected carcinogen as outlined by OSHA, IARC, and the NTP (see below).

Measures of Toxicity:
Acute toxicities are calculated based on component toxicities
Mixture: Acute Oral Toxicity: LD_{50} Rat: > 3,000 mg/kg
Acute Dermal Toxicity: No sufficient data available
Acute Inhalation Toxicity: LC_{50} Rat: > 0.35 mg/l

Isocyanic Acid, Polymethylenepolyphenylene Ester	**CAS # 9016-87-9**
Acute Inhalation Toxicity	LC_{50} Rat: 0.49 mg/l
Diphenylmethane-4,4'-di-isocyanate	**CAS # 101-68-8**
Acute Oral Toxicity	LD_{50} Rat: 4,700 mg/kg
Diphenylmethane-2,4'-di-isocyanate	**CAS # 5873-54-1**
Acute Oral Toxicity	LD_{50} Rat: > 2,000 mg/kg
Acute Inhalation Toxicity	LC_{50} Rat: 370 mg/m^3

Carcinogen Claims:
OSHA: **None,** International Agency for Research on Cancer (IARC): **None**
ACGIH: **None,** National Toxicology Program (NTP) Report on Carcinogens: **None**

12. ECOLOGICAL INFORMATION

Eco-toxicity: This substance is not expected to be harmful to aquatic organisms; however it is still strongly advised that this substance does not enter the environment.

Diphenylmethane-4,4'-di-isocyanate **CAS # 101-68-8**
Toxicity to Daphnia EC_{50} – 0.35 mg/l (Water Flea; 24 h)

Diphenylmethane-2,4'-di-isocyanate **CAS # 5873-54-1**
Toxicity to Fish LC_{50} > 1.0 mg/l (Zebra Fish; 96 h)
Toxicity to Daphnia EC_{50} > 1.0 mg/l (Water Flea; 24 h)

Persistence & Degradability: No data available
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. (Methylene Diphenyl Diisocyanate)
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. (Methylene Diphenyl Diisocyanate)

IATA (Air) SHIPPING CLASSIFICATION:
ICAO/IATA-DGR: 9
UN NUMBER: UN3082
HAZARD LABEL: Miscellaneous
Description of the goods
Environmentally hazardous substance, liquid, n.o.s. (Methylene Diphenyl Diisocyanate)

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

Component	CAS #	Weight %	CERCLA RQ
Polymeric diphenylmethane diisocyanate	9016-87-9	45 – 60	--
MDI	101-68-8	45 – 60	5,000

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

WHMIS Classification: 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/or reproductive harm.

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.