

# Safety Data Sheet:

Revision Date: 08/14/19

Technical Service  
(888)780-3229 (Option 2)



# Corro Cure 2503 Part B

## 1. Product and Company Identification

**Product Name:** Corro Cure 2503  
**Product Class:** Epoxy Hardener, Part B  
**Product Type:** Cycloaliphatic Amine

**D.O.T. Category:** No dangerous goods  
**Manufacturer:** Corroshield Industries Inc.  
2575 United Lane  
Elk Grove, IL 60009  
**Telephone:** 847/298-7770  
**Emergency:** 1-800/535-5053 INFOTRAC

## 2. Hazards Identification

### GHS classification

Acute toxicity – Oral: Category 4  
Skin corrosion: Category 2  
Serious Eye Damage: Category 1  
Skin sensitization: Category 1  
Specific target organ toxicity – repeated exposure – Oral: Category 2

### GHS label elements

Description: Resin Compound D.O.T. Not Regulated.  
Hazard pictograms/symbols:



Signal Word: Danger  
Hazard Statements: H302:Harmful if swallowed.  
H315 Causes skin irritation  
H317:May cause an allergic skin reaction.  
H373a:May cause damage to organs through prolonged or repeated exposure if swallowed.  
H318:Causes serious eye damage

### Precautionary Statements:

Prevention: P260:Do not breathe dust/fume/gas/mist/vapours/spray.  
P264:Wash hands thoroughly after handling.  
P280:Wear protective gloves/protective clothing/eye protection/face protection.

Response: P301+P330+P331 :IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
P303+P361+P353 :IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P305+P351+P338 :IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 :Immediately call a POISON CENTRE or doctor/physician.  
P333+P313 :If skin irritation or rash occurs: Get medical advice/attention.  
P363 :Wash contaminated clothing before reuse.

Disposal: P501:Disposal of contents/container to be specified in accordance with regulations.

Hazards not otherwise classified: Components of the product may affect the nervous system. Mild skin irritant.  
Risk of serious damage to eyes.  
Harmful if swallowed.

### 3. Composition/Information on Ingredients

<40 % Benzyl alcohol Cas. No. 100-51-6,  
<5% Methylenebiscyclohexanamine, 4,4' Cas. No. 1761-71-3,  
<40% Methyleneoxide, polymer with benzenamine, hydrogenated Cas. No. 135108-88-2

### 4. First Aid Measures

General Advice: Seek medical advice. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately.

Eye Contact: Rinse immediately with plenty of water also under the eyelids for at least 20 minutes. Remove contact lenses.

Skin Contact: Wash off immediately with plenty of water for at least 20 minutes. Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay.

Ingestion: Never give anything by mouth to an unconscious person. Prevent aspiration of vomit. Turn victim's head to the side.

Inhalation: Move to fresh air.

Most Important symptoms/ effects- acute and delayed: Neurological disorders Eye disease. Skin disorders and Allergies.

### 5. Fire-Fighting Measures

Suitable extinguishing media: Alcohol-resistant foam.  
Carbon dioxide (CO<sub>2</sub>).  
Dry chemical.  
Dry sand.  
Limestone powder.

Specific hazards: Incomplete combustion may form carbon monoxide. May generate ammonia gas. May generate toxic nitrogen oxide gases. Burning produces noxious and toxic fumes. Downwind personnel must be evacuated.

Special protective equipment for fire-fighters: Avoid contact with the skin. Use personal protective equipment. Wear self contained breathing apparatus for fire fighting if necessary

### 6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures: Wear suitable protective clothing, gloves and eye/face protection. Use self-contained breathing apparatus and chemically protective clothing. Evacuate personnel to safe areas.

Environmental precautions: Construct a dike to prevent spreading.

Methods for cleaning up: Approach suspected leak areas with caution. Place in appropriate chemical waste container.

Additional advice: If possible, stop flow of product.

### 7. Handling and Storage

Handling: Do not use sodium nitrite or other nitrosating agents in formulations containing this product. Suspected cancer-causing nitrosamines could be formed. Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations. Avoid contact with eyes. Use personal protective equipment. When using, do not eat, drink or smoke.

Storage: Do not store near acids. Keep away from alkalis. Keep containers tightly closed in a dry, cool and well-ventilated place.

## 8. Exposure Controls/Personal Protection

Engineering measures: Provide readily accessible eye wash stations and safety showers.  
Provide natural or explosion-proof ventilation adequate to ensure concentrations are kept below exposure limits.

### Personal Protective Equipment

Respiratory protection: Not required for properly ventilated areas.

Hand protection: Butyl-rubber  
Nitrile rubber.  
Neoprene gloves.  
Impervious gloves.  
Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Eye protection: Chemical resistant goggles must be worn.

Skin and body protection: Long sleeve shirts and trousers without cuffs. Impervious clothing

Special instructions for protection and hygiene: Discard contaminated leather articles. Wash hands at the end of each workshift and before eating, smoking or using the toilet. Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Provide readily accessible eye wash stations and safety showers.

### Exposure Limit(s)

Benzyl alcohol	Time Weighted Average (TWA): WEEL	10 ppm	44.20 mg/m <sup>3</sup>
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## 9. Physical and Chemical Properties

Appearance:	Liquid. Amber colour
Odor:	Ammoniacal.
Odor threshold:	No data available.
pH:	Alkaline
Melting point/range:	No data available.
Boiling point/range:	432 °F (222 °C)
Flash point:	219 °F (104 °C)
Evaporation rate:	No data available.
Flammability (solid, gas):	Not applicable.
Upper/lower explosion/flammability limit:	Not applicable
Vapor pressure:	0.70 mmHg at 70 °F (21 °C)
Water solubility:	No data available
Relative vapor density:	Not applicable
Relative density:	1.06 (water = 1)
Partition coefficient (n-octanol/water):	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	No data available
Molecular Weight:	No data available
Density:	66.174 lb/ft <sup>3</sup> (1.06 g/cm <sup>3</sup> ) at 70 °F (21 °C)

## 10. Stability and Reactivity

Chemical Stability: Stable under normal conditions

Conditions to avoid: no data available

Materials to avoid: Amines.  
Incompatible with bases.  
Reducing agents.  
Reactive metals (e.g. sodium, calcium, zinc etc.).

Materials reactive with hydroxyl compounds.  
**CAUTION!** N-Nitrosamines, many of which are known to be potent carcinogens, may be formed when the product comes in contact with nitrous acid, nitrites or atmospheres with high nitrous oxide concentrations.  
 Nitrous acid and other nitrosating agents.  
 Organic acids (i.e. acetic acid, citric acid etc.).  
 Mineral acids.  
 Sodium hypochlorite.  
 Product slowly corrodes copper, aluminum, zinc and galvanized surfaces.  
 Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion.  
 Oxidizing agents.  
 Nitric acid.  
 Ammonia  
 Nitrogen oxides (NO<sub>x</sub>).  
 Nitrogen oxide can react with water vapors to form corrosive nitric acid.  
 Carbon monoxide.  
 Carbon dioxide (CO<sub>2</sub>).  
 Aldehydes  
 Flammable hydrocarbon fragments.  
 Nitrosamine.  
 Organic acid vapors

Hazardous decomposition products:

Possibility of hazardous Reactions/Reactivity: No data available

## 11. Toxicological Information

### 11.1 Information on toxicological effects

#### Likely routes of exposure

Effects on eye:

Effects on skin:

Causes eye burns

If absorbed through the skin, may cause central nervous system effects, such as headache, nausea, dizziness, confusion, breathing difficulties. Mild skin irritation.

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

Inhalation effects:

May cause central nervous system effects, such as headache, nausea, dizziness, confusion, breathing difficulties. Severe cases of overexposure can result in respiratory failure.

Ingestion effects:

Harmful if swallowed

Symptoms:

No data available

#### Acute Toxicity

Acute Oral Toxicity:

LD50 : 1,200 mg/kg Species : Rat

Inhalation:

No data is available on the product itself

#### Inhalation – Components

Benzyl alcohol

LC50 (4 h) : > 4.178 mg/l Species : Rat. OECD Test Guideline 403

Acute Dermal Toxicity:

No data is available on the product itself.

#### Acute Dermal Toxicity – Components

Benzyl alcohol

LD50 : 2,000 mg/kg

Species : Rabbit.

Methylenebis(cyclohexyl)amine, 4,4'-

LD50 : 2,110 mg/kg

Species : Rabbit.

Methyleneoxide, polymer with benzenamine, hydrogenated

LD50 : > 2,000 mg/kg Estimated

Species : Rabbit

Skin corrosion/irritation:

Mild irritant to the skin of a rabbit

Serious eye damage/eye irritation:

Risk of serious damage to eyes.

Sensitization:

May cause sensitization of susceptible persons by skin contact

#### Chronic toxicity or effects from long term exposures

Carcinogenicity:

No data available

Reproductive toxicity:

No data is available on the product itself

Germ cell mutagenicity:

No data is available on the product itself

Specific target organ systemic toxicity (single exposure): No data available.  
 Specific target organ systemic toxicity (repeated exposure): No data available.  
 Aspiration hazard: No data available  
 Delayed and Immediate Effects and Chronic Effects from Short and Long Term Exposure: This product contains no listed carcinogens according to IARC, ACGIH, NTP and/or OSHA in concentrations of 0.1 percent or greater. Neurological disorders, Eye disease., Skin disorders and Allergies

Mixed polycycloaliphatic amines was tested in rats for systemic effects in a subchronic (28-day) oral study at doses ranging from 15 to 300 mg/kg/day. Effects seen at 300 mg/kg/day included decreased survival, decreased body weight gain, increased liver, kidney, and adrenal weights and histological changes in the liver, kidney, adrenals and spleen. The No-Observed-Adverse-Effect-Level (NOAEL) was 15 mg/kg/day., Rats exposed orally to 800 mg/kg benzyl alcohol for thirteen weeks exhibited CNS depression and histopathological changes in the brain, thymus and skeletal muscles. The No Observed Adverse Effect Level (NOAEL) was 400 mg/kg. No evidence of carcinogenicity was seen in a two-year study with rats and mice.

## 12. Ecological Information

### Ecotoxicity effects

Aquatic toxicity	Data	Species
<b>Toxicity to fish - Components</b>		
Benzyl alcohol	LC50 (96 h) : 10 mg/l	Bluegill sunfish ( <i>Lepomis macrochirus</i> )
Benzyl alcohol	LC50 (96 h) : 460 mg/l	Fathead minnow ( <i>Pimephales promelas</i> )
Methylenebis(cyclohexyl)amine, 4,4'	LC0 (96 h) : 46 mg/l	Golden orfe ( <i>Leuciscus idus</i> ).
Methylenebis(cyclohexyl)amine, 4,4'	LC50 (96 h) : > 100 mg/l	Golden orfe ( <i>Leuciscus idus</i> ).
<b>Toxicity to daphnia – Components</b>		
Methylenebis(cyclohexyl)amine, 4,4'	EC50 (48 h) : 6.84 mg/l	Daphnia magna
<b>Toxicity to algae – Components</b>		
Benzyl alcohol	IC50 (72 h) : 700 mg/l	Algae
Methylenebis(cyclohexyl)amine, 4,4'	EC50 (72 h) : 140 - 200 mg/l	Algae
Toxicity to other organisms	No data available	

### Persistence and degradability

Biodegradability: No data is available on the product itself

Mobility: No data available

Bioaccumulation: No data is available on the product itself

### Bioaccumulation - Components

Benzyl alcohol: Methyleneoxide, polymer with benzenamine, hydrogenated Does not bioaccumulate.

## 13. Disposal Considerations

Waste from residues/unused products: Disposal of container and unused contents in accordance with Federal, State and Local Regulations

Contaminated packaging: Disposal of container and unused contents in accordance with Federal, State and Local Regulations

## 14. Transport Information

DOT: Not dangerous goods

IATA: Not dangerous goods

IMDG: Not dangerous goods

TDG: Not dangerous goods



## 15. Regulatory Information

Toxic Substance Control Act (TSCA) 12(b) Component(s): None.  
USA: regulatory list: TSCA, included on inventory  
Canada: regulatory list: DSL, not on inventory

EPA SARA Title III Section 312 (40 CFR 370) Hazard Classification  
Acute Health Hazard  
EPA SARA Title III Section 313 (40 CFR 372) Component(s) above 'de minimus' level  
None.  
US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)  
This product does not contain any chemicals known to State of California to cause cancer, birth defects or any other harm.

WHMIS Ingredient Disclosure List.  
WHMIS Trade Secret Registry Number(s)  
5017 Grant date 1/4/2005

## 16. Other Information

**HMIS Rating**  
Health: 2  
Flammability: 1  
Physical hazard: 0

Revision Date: August 14, 2019

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