

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURED BY: HALOX

1326 Summer Street Hammond, IN 46320-2240

PRODUCT NAME: HALOX® 900

Phone: 219-933-1560 (US Central) M-F 8:00 am - 5:00 pm

Chemtrec: 800-424-9300

+1 (703) 527-3887 (International)

Product Use: Water-based rust preventative.

2. COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS STATEMENT:

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). The product is a mixture of components listed below with other harmless substances.

Hazardous Components	% Composition	ACGIH TLV:	ACGIH STEL:	OSHA PEL:	OSHA STEL:	TWA/STEL Units are in:
Monoethanolamine 141-43-5	30-70	7.5	15	6	NE	mg/m³
Ethanol 64-17-5	10-20	1880	NE	1900	NE	mg/m³
Polyamine Fatty Acid Salt trade secret	15-25	NE	NE	NE	NE	mg/m³

EXPOSURE LIMIT STATEMENT

NE - None established

HMIS

HEALTH:	3
FLAMMABILITY:	2
REACTIVITY:	0
PERSONAL PROTECTION:	*

^{*} Recommended personal protective measures are identified in Section 8.0 of this document.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

Clear liquid. Slight amine odor. Thermal decomposition, as a result of a fire, may cause the generation of toxic gases. Spill materials and associated run-off should not be allowed to reach waterways.

POTENTIAL ACUTE HEALTH EFFECTS:

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EYE CONTACT:

May cause eye irritation. Symptoms may include stinging, tearing, redness, and swelling.

SKIN CONTACT:

May cause irritation or rash.

INGESTION:

May cause abdominal discomfort such as nausea or vomiting. Can cause gastrointestinal irritation.

INHALATION:

Inhalation of vapors or mists may cause irritation in the respiratory tract. Inhalation of vapors, aerosols, and/or mists of the components of this product may cause damage to contacted tissue.

Routes of Exposure: Inhalation, ingestion, skin and eye contact.

POTENTIAL CHRONIC HEALTH EFFECTS:

Prolonged or repeated inhalation of the components of this product may cause allergic reaction and/or sensitization, as well as a sore throat. Long-term effects of repeated and prolonged inhalation of these components may result in nervous system disorders, behavioral changes, decreased motor function, adverse respiratory effects, and decreased blood pressure. Prolonged or repeated eye contact with components of this product via vapors, mists, or aerosols may result in burns, conjunctivitis, and/or corneal damage. Prolonged or repeated skin contact may cause irritation and dermatitis. These symptoms are associated only with specific components of this product, which are present in small quantities.

4. FIRST AID MEASURES

EYES:

Do not let victim rub eyes. Flush eyes well with water for at least 15 minutes. If irritation persists, seek medical attention.

SKIN:

Remove contaminated clothing. Wash thoroughly with soap and water. Seek medical attention if irritation persists.

INHALATION:

Move person to fresh air. Give artificial respiration if necessary. If breathing is difficult, administer oxygen. Seek medical attention if symptoms develop or persist.

INGESTION:

If victim is conscious and alert, give 2-4 cupful's of milk or water. Do not induce vomiting. Seek medical attention if symptoms develop or persist.

5. FIRE FIGHTING MEASURES

FLASH POINT (° F) 110 (43 °C)

OSHA FLAMMABILITY CLASSIFICATION: Not Applicable.

EXTINGUISHING MEDIA: This material is a flammable liquid and will not react with commercially available extinguishing media. Use appropriate extinguishing media, foam, dry chemical or carbon dioxide, for surrounding fire.

SPECIAL FIREFIGHTING PROCEDURES: Firefighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing.

AUTOIGNITION TEMP (° F) Unknown

UNUSUAL FIRE AND EXPLOSION HAZARDS: None.

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6. ACCIDENTAL RELEASE MEASURES

ACTION TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Protect against identified hazards through use of personal protection equipment and proper work and hygiene practices. Limit foot and vehicular traffic to minimize mechanical agitation and dispersion. Remove sources of ignition. Stop the leak. If necessary, ventilate the space involved. If recovery is not feasible, use an appropriate non-relative sorbent material to contain and remove spilled product. Transfer used absorbent material to an appropriate container for future disposal. Notify In-plant Spill Response Coordinator or appropriate party to determine any additional requirements pertaining to spill response.

CONTAINMENT TECHNIQUES: If this product is to be used in bulk quantities, containment devices such as diked areas should be used to contain the liquid in the event of a spill.

SPILL RESPONSE EQUIPMENT:

- Broom, wet mop
- Non-reactive absorbent material
- · Containers for collection

SPILL RESPONSE PERSONAL PROTECTIVE EQUIPMENT:

- Impermeable gloves (rubber, nitrile, or butyl rubber)
- · Chemical resistant coveralls or splash suits
- · Chemical/safety impact goggles
- · Chemical resistant boot covers
- If airborne concentrations cannot be controlled below the required or recommended exposure limits, respiratory equipment, as per Section 8.0, may be required.

7. HANDLING AND STORAGE

HANDLING:

Always wear recommended personal protective equipment. Avoid contact with skin and eyes.

STORAGE:

KEEP FROM FREEZING. Store in a dry area, 50 to 140 F (10 to 60 C). Avoid contact with acids, oxidizers, heat, or flames. Keep containers closed when not in use. Store containers in an appropriate area to minimize the potential for damage as a result of facility operations.

Note:

Frozen or crystallized material is completely recoverable by subjecting product to 75 to 80 F (24-27 C) temperatures for approximately 4 hours.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: General mechanical ventilation is acceptable, as long as concentrations are maintained below required/recommended limits. Where acceptable concentrations cannot be maintained by general mechanical ventilation, local exhaust ventilation is recommended.

RESPIRATORY PROTECTION EQUIPMENT: Not required for properly ventilated areas. If vapors or mist should accumulate, use an appropriate NIOSH/MSHA approved respirator. Utilization of respiratory equipment should be in accordance with 29 CFR 1910.1025 and 29 CFR 1910.134.

PROTECTIVE GLOVES: To prevent any contact, wear impervious gloves such as neoprene and butyl rubber. Tyvek coveralls or rubber aprons should be worn if the potential for skin contact with this material exists.

EYE AND FACE PROTECTION: Wear safety glasses with side shields or chemical goggles.

OTHER PROTECTIVE EQUIPMENT: An emergency eye wash is recommended in the work area and should, at a minimum, meet the requirements under ANSI Z.358.1 for location, design, and operation.

PHYSICAL AND CHEMICAL PROPERTIES

Boiling Range/Point None established

Freezing Point None established

Melting Point Not applicable

Vapor Pressure None established

Vapor Density (AIR=1) None established

Physical State Liquid

Color Clear

Percent Moisture Not applicable

Solubility in Water Miscible

VOC = lbs/gal (g/L) 4.62 (554.05)

(EPA Method 24)

%Volatile by Volume None established

Evaporation Rate None established

(Butyl Acetate=1)

Density 8.33 lbs/gal

pH* 10.5-10.9

Specific Gravity (water=1) 1.00 g/cm³

*NEAT

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10. STABILITY AND REACTIVITY

STABILITY: Stable.

HAZARDOUS POLYMERIZATION: Will not occur.

HAZARDOUS THERMAL DECOMPOSITION/COMBUSTION PRODUCTS: Oxides of carbon and nitrogen.

INCOMPATIBILITY (MATERIALS TO AVOID): Strong bases, strong acids, and oxidizing agents. Organic halides.

CONDITIONS TO AVOID: Incompatible materials, excess heat.

11. TOXICOLOGICAL INFORMATION

ACUTE ORAL LD50 (mg/kg): >2,000 (RAT)

ACUTE INHALATION LC50: No data at this time.

ACUTE DERMAL LD50 (mg/kg): Non-Irritating (RBT)

ACUTE EYE EXPOSURE: Corrosive. Irreversible moderate opacity in the cornea observed in 1/3 of rabbits.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: No data at this time

CHEMICAL FATE INFORMATION: No data at this time.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Disposal should be made in accordance with federal, state and local regulations.

EMPTY CONTAINERS: Dispose of in accordance with all federal, state, and local regulations or recycle.

14. TRANSPORT INFORMATION

DOT SHIPPING NAME: UN 2924, Flammable Liquid, Corrosive, N.O.S. (ETHANOL, ETHANOLAMINE), 3

(8), PG III, (43 °C), ERG 132

AIR FREIGHT UN 2924, Flammable Liquid, Corrosive, N.O.S. (ETHANOL, ETHANOLAMINE), 3

TRANSPORTATION: (8), PG III, (43 °C), ERG 132

OCEAN TRANSPORTATION: UN 2924, Flammable Liquid, Corrosive, N.O.S. (ETHANOL, ETHANOLAMINE), 3

(8), PG III, (43 °C), ERG 132

15. REGULATORY INFORMATION

TSCA STATUS:

All components of this product are on the US TSCA Inventory.

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CALIFORNIA PROPOSITION 65:

This product is not known to contain any chemicals known to the state of California to cause cancer or birth defects. However, we do not conduct routine analysis for all listed materials.

SARA 302 EXTREMELY HAZARDOUS SUBSTANCES LIST:

This product does not contain greater than 1.0% of any chemical substance on the SARA Extremely Hazardous Substance List.

SARA (311, 312) HAZARD CLASS:

Acute health hazard. Chronic health hazard. Fire hazard.

SARA SECTION 313 TOXIC CHEMICALS:

None

CANADIAN INVENTORY:

All components are on the Domestic Substance List (DSL).

EINECS REGULATIONS:

All components are on the European Inventory of Existing Commercial Chemical Substances (EINECS).

16. OTHER INFORMATION

DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES:

The information in this document is believed to be correct as of the date issued. However, no warranty of merchantability, fitness for any particular purpose, or any other warranty is expressed or is to be implied regarding the accuracy or completeness of this information, the results to be obtained from the use of this information or the product, the safety of this product, or the hazards related to its use. This information and product are furnished on the condition that the person receiving them shall make his own determination as to the suitability of the product for his particular purpose and on the condition that he assume the risk of his use thereof.

17. LABEL INFORMATION

SIGNAL WORD: WARNING!

Flammable Liquid, Corrosive

TARGET ORGANS: May cause eye and skin burns.

EYES: Do not let victim rub eyes. Flush eyes well with water for at least 15 minutes. If

irritation persists, seek medical attention.

SKIN: Remove contaminated clothing. Wash thoroughly with soap and water. Seek medical

attention if irritation persists.

INGESTION: If victim is conscious and alert, give 2-4 cupful's of milk or water. Do not induce

vomiting. Seek medical attention if symptoms develop or persist.

INHALATION: Move person to fresh air. Give artificial respiration if necessary. If breathing is

difficult, administer oxygen. Seek medical attention if symptoms develop or persist.

HANDLING: Always wear recommended personal protective equipment. Avoid contact with skin,

eyes and clothing.

STORAGE: KEEP FROM FREEZING. Store in a dry area, 50 to 140 F (10 to 60 C). Avoid contact

with acids, oxidizers, heat, or flames. Keep containers closed when not in use. Store containers in an appropriate area to minimize the potential for damage as a result of

facility operations.

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IN CASE OF SPILL: Eliminate all ignition sources. Spilled material may be absorbed into the appropriate

absorbent material. Use non-sparking tools and explosion proof equipment. Collect

and dispose in accordance with federal, state and local regulations.

EXTINGUISHING MEDIA: This material is a flammable liquid and will not react with commercially available

extinguishing media. Use appropriate extinguishing media, foam, dry chemical or

carbon dioxide, for surrounding fire.

CALIFORNIA PROPOSITION 65: This product is not known to contain any chemicals known to the state of California to

cause cancer or birth defects. However, we do not conduct routine analysis for all

listed materials.