

(SP) Steamplant

JUN 25 2007

MATERIAL SAFETY DATA SHEET

Ashland

Page 001
Date Prepared: 08/18/04
Date Printed: 06/08/07
MSDS No: 306.0249274-007.007

AMERCOR 1848 CORROSION INHIBITOR

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity

Product Name: AMERCOR 1848 CORROSION INHIBITOR
Product Code:
General or Generic ID: CORROSION INHIBITOR

RECEIVED

JUL 17 2007

Company

Ashland
Ashland Distribution Co. &
Ashland Specialty Chemical Co.
P. O. Box 2219
Columbus, OH 43216
614-790-3333

Emergency Telephone Number:

1-800-ASHLAND (1-800-252-5269)
24 hours everyday

Safety & Environmental Health

Regulatory Information Number:
1-800-325-3751

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient(s)	CAS Number	% (by weight)
CYCLOHEXYLAMINE	108-91-8	10.0- 25.0
DIETHYLETHANOLAMINE	100-37-8	10.0- 25.0
MORPHOLINE	110-91-8	10.0- 25.0

3. HAZARDS IDENTIFICATION

Potential Health Effects

Eye

Can cause permanent eye injury. Symptoms include stinging, tearing, redness, and swelling of eyes. Can injure the cornea and cause blindness. Additional symptoms of eye exposure may include: halo vision (blurred vision around bright objects).

Skin

Can cause permanent skin damage. Symptoms may include redness, burning, and swelling of skin, burns, and other skin damage. Additional symptoms of skin contact may include: allergic skin reaction (delayed skin rash which may be followed by blistering, scaling and other skin effects), Passage of this material into the body through the skin is possible, and skin contact may be harmful.

Swallowing

Swallowing this material may be harmful or fatal. Symptoms may include severe stomach and intestinal irritation (nausea, vomiting, diarrhea), abdominal pain, and vomiting of blood. Swallowing this material may cause burns and destroy tissue in the mouth, throat, and digestive tract. Low blood pressure and shock may occur as a result of severe tissue injury.

Inhalation

Breathing of vapor or mist is possible. Breathing this material may be harmful. Symptoms usually occur at air concentrations higher than the recommended exposure limits (See Section 8).

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Symptoms of Exposure

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), cough, headache, central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), nervousness, muscle weakness, effects on blood pressure, chest pain, effects on heart rate, loss of coordination, difficult breathing, lung edema (fluid buildup in the lung tissue), May cause methemoglobinemia, a blood abnormality that may cause headache, difficulty breathing, lightheadedness, weakness, confusion, rapid heart rate and cyanosis (lack of oxygen in the tissues causing blue-colored skin and nails).

Target Organ Effects

Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: mild, reversible bladder effects, effects on male fertility, nasal damage, testis damage, eye damage, kidney damage, liver damage, lung damage.

Developmental Information

This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

Cancer Information

No data

Other Health Effects

This material (or a component) has been both positive and negative in tests for mutagenicity. The relevance of this finding to human health is uncertain.

Primary Route(s) of Entry

Inhalation, Skin absorption, Skin contact, Ingestion.

4. FIRST AID MEASURES

Eyes

If material gets into the eyes, immediately flush eyes gently with water for at least 15 minutes while holding eyelids apart. If symptoms develop as a result of vapor exposure, immediately move individual away from exposure and into fresh air before flushing as recommended above. Seek immediate medical attention.

Skin

Immediately flush skin with water for at least 15 minutes while removing contaminated clothing and shoes. Seek immediate medical attention. Wash clothing before reuse and discard contaminated shoes.

Swallowing

Seek immediate medical attention. Do not induce vomiting. Vomiting will cause further damage to the mouth and throat. If individual is conscious and alert, immediately rinse mouth with water and give milk or water to drink. If possible, do not leave individual unattended.

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Inhalation

If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen.

Note to Physicians

Overexposure to this product (or a component) may cause methemoglobinemia, which in sufficient concentration causes cyanosis. Severe cyanosis may require intravenous injection of methylene blue. Methylene blue is contraindicated if the patient has confirmed or suspected glucose-6-phosphate dehydrogenase deficiency. Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: skin, lung (for example, asthma-like conditions), liver, kidney, male reproductive system, eye. Exposure to this material may aggravate any preexisting condition sensitive to a decrease in available oxygen, such as chronic lung disease, coronary artery disease or anemias.

5. FIRE FIGHTING MEASURES

Flash Point

138.0 F (58.8 C) PMCC

Explosive Limit

(for component) Lower 1.5 Upper 9.4 %

Autoignition Temperature

No data

Hazardous Products of Combustion

May form: carbon dioxide and carbon monoxide, nitrogen compounds, various hydrocarbons.

Fire and Explosion Hazards

Material is volatile and readily gives off vapors which may travel along the ground or be moved by ventilation and ignited by pilot lights, flames, sparks, heaters, smoking, electric motors, static discharge or other ignition sources at locations near the material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively.

Extinguishing Media

alcohol resistant (AR) foam, water fog, carbon dioxide, dry chemical.

Fire Fighting Instructions

Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA).

NFPA Rating

Health - 3, Flammability - 2, Reactivity - 1

6. ACCIDENTAL RELEASE MEASURES

Small Spill

Absorb liquid on vermiculite, floor absorbent, or other absorbent material and transfer to hood. Eliminate all sources of ignition such as flares, flames (including pilot lights), and electrical sparks. Persons not wearing proper personal protective equipment should be excluded from area of spill.

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Large Spill

Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source. Prevent from entering drains, sewers, streams or other bodies of water. Prevent from spreading. If runoff occurs, notify authorities as required. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal. Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred.

7. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Static ignition hazard can result from handling and use. Electrically bond and ground all containers, personnel and equipment before transfer or use of material. Special precautions may be necessary to dissipate static electricity for non-conductive containers. Use proper bonding and grounding during product transfer as described in National Fire Protection Association document NFPA 77. Do not use sodium nitrite or other nitrosating agents in formulations containing this product. Suspected cancer-causing nitrosamines could be formed.

Storage

Keep from freezing.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection

Chemical splash goggles and face shield (8" min.) in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. (Consult your industrial hygienist.)

Skin Protection

Wear resistant gloves such as: natural rubber, nitrile rubber, To prevent skin contact, wear impervious clothing and boots. Other protective equipment: eyewash station, emergency shower.

Respiratory Protections

Exposures in the workplace should be monitored if worker exposure to vapor or mists exceeds the PEL or TLV. Only a NIOSH/MSHA approved respirator and cartridge (TC-23C) is to be used. Monitoring results must be used to assess the proper level of respiratory protection necessary (such as: full face piece respirator with chemical cartridges or self-contained breathing apparatus {scuba}, etc.). Proper engineering and/or administrative controls should be used to reduce worker exposure. The facility's respiratory program must meet the requirements established in 29 CFR 1910.134, which includes a program for medical evaluation.

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Engineering Controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below level of overexposure (from known, suspected or apparent adverse effects).

Exposure Guidelines

Component

CYCLOHEXYLAMINE (108-91-8)
OSHA VPEL 10.000 ppm - TWA
ACGIH TLV 10.000 ppm - TWA

DIETHYLETHANOLAMINE (100-37-8)
OSHA PEL 10.000 ppm - TWA (Skin)
OSHA VPEL 10.000 ppm - TWA (Skin)
ACGIH TLV 2.000 ppm - TWA (Skin)

MORPHOLINE (110-91-8)
OSHA PEL 20.000 ppm - TWA (Skin)
OSHA VPEL 20.000 ppm - TWA (Skin)
OSHA VPEL 30.000 ppm - STEL (Skin)
ACGIH TLV 20.000 ppm - TWA (Skin)
ACGIH TLV 30.000 ppm - STEL (Skin)

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point

(for component) 212.0 F (100.0 C)

Vapor Pressure

(for component) 17.500 mmHg

Specific Vapor Density

> 1.000 @ AIR=1

Specific Gravity

.970 @ 77.00 F

Liquid Density

8.089 lbs/gal @ 77.00 F
.970 kg/l @ 25.00 C

Percent Volatiles

100.0 %

Evaporation Rate

SLOWER THAN ETHYL ETHER

Appearance

CLEAR TO LIGHT AMBER LIQUID

State

LIQUID

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Physical Form
No data

Color
CLEAR TO LIGHT AMBER

Odor
No data

pH
12.5

Freezing Point
-29.0 F (-33.8 C)

10. STABILITY AND REACTIVITY

Hazardous Polymerization
Product will not undergo hazardous polymerization.

Hazardous Decomposition
May form: carbon dioxide and carbon monoxide, nitrogen compounds, various hydrocarbons.

Chemical Stability
Stable.

Incompatibility
Avoid contact with: excessive heat, strong acids, strong oxidizing agents, temperature extremes.

11. TOXICOLOGICAL INFORMATION

No data

12. ECOLOGICAL INFORMATION

Ecotoxicological Information
96 hour LC50 rainbow trout (static conditions): 7071.1 mg/l
96 hour LC50 fathead minnow (static conditions): 947.3 mg/l
48 hour LC50 Daphnia magna (static conditions): 883.9 mg/l

Chemical Fate Information
BOD5: 1,170,000 mg/l
COD: 1,185,000 mg/l

13. DISPOSAL CONSIDERATION

Waste Management Information
Dispose of in accordance with all applicable local, state and federal regulations. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Ashland Distribution Company, IC&S Environmental Services Group at 800-531-7106.

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14. TRANSPORT INFORMATION

DOT Information - 49 CFR 172.101

DOT Description:

AMINES, FLAMMABLE, CORROSIVE, N.O.S., 3(8), UN2733, III

Container/Mode:

55 GAL DRUM/TRUCK PACKAGE

NOS Component:

CYCLOHEXYLAMINE
 MORPHOLINE

RQ (Reportable Quantity) - 49 CFR 172.101
 Not applicable

Other Transportation Information

The Transport Information may vary with the container and mode of shipment.

15. REGULATORY INFORMATION

US Federal Regulations

TSCA (Toxic Substances Control Act) Status

TSCA (UNITED STATES) The intentional ingredients of this product are listed.

CERCLA RQ - 40 CFR 302.4(a)
 None

CERCLA RQ - 40 CFR 302.4(b)
 Materials without a "listed" RQ may be reportable as an "unlisted hazardous substance". See 40 CFR 302.5 (b).

SARA 302 Components - 40 CFR 355 Appendix A

Section 302 Component(s)	TPQ (lbs)	RQ (lbs)
CYCLOHEXYLAMINE	10000	10000

Section 311/312 Hazard Class - 40 CFR 370.2
 Immediate(X) Delayed(X) Fire(X) Reactive() Sudden Release of Pressure()

SARA 313 Components - 40 CFR 372.65
 None

OSHA Process Safety Management 29 CFR 1910
 None listed

EPA Accidental Release Prevention 40 CFR 68

RMP Component (s)	Condition	TQ (lbs)
CYCLOHEXYLAMINE [CYCLOHEXANAMINE]		15000

International Regulations
 Inventory Status

DSL (CANADA) The intentional ingredients of this product are listed.

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State and Local Regulations
California Proposition 65
None

New Jersey RTK Label Information

CYCLOHEXYLAMINE	108-91-8
DIETHYLAMINOETHANOL	100-37-8
MORPHOLINE	110-91-8

Pennsylvania RTK Label Information

CYCLOHEXANAMINE	108-91-8
ETHANOL, 2-(DIETHYLAMINO)-	100-37-8
MORPHOLINE	110-91-8

16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

