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29 CFR 1910.1200 (OSHA HazCom 2012)

### **SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Product identifier

Trade name

: Amercor™ 8750

CORROSION INHIBITOR

™ Trademark, Solenis or its subsidiaries or affiliates,

registered in various countries

# Recommended use of the chemical and restrictions on use

| Details of the supplier of the safety data | Emergency telephone number                  |
|--|---|
| sheet                                      | 1-844-SOLENIS (844-765-3647) / 606-329-5705 |
| Solenis LLC                                |   |
| 500 Hercules Road                          | Product Information                         |
| Wilmington Delaware 19808                  | 1-844-SOLENIS (844-765-3647)                |
| United States of America                   |   |
|  |   |
|  |   |
| RegulatoryRequestsNA@solenis.com           |   |
| _ · · · · _                                |   |

### **SECTION 2. HAZARDS IDENTIFICATION**

**GHS Classification** 

Flammable liquids

: Category 3

Acute toxicity (Oral)

: Category 4

Acute toxicity (Inhalation)

: Category 4

Acute toxicity (Dermal)

: Category 3

Skin corrosion

: Category 1A

Serious eye damage

: Category 1

Reproductive toxicity

: Category 2

Specific target organ systemic toxicity - single

exposure

: Category 3 (Respiratory system)

**GHS Label element** 

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| 50735   |                           |

Hazard pictograms











Signal Word

: Danger

Hazard Statements

Flammable liquid and vapor. Harmful if swallowed or if inhaled.

Toxic in contact with skin.

Causes severe skin burns and eye damage.

Causes serious eye damage. May cause respiratory irritation.

Suspected of damaging fertility or the unborn child.

Precautionary Statements

#### : Prevention:

Obtain special instructions before use.

Do not handle until all safety precautions have been read and

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ ventilating/ lighting/ equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge. Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

Wash skin thoroughly after handling.

Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area.

Wear protective gloves/ protective clothing/ eye protection/ face

protection.

#### Response:

IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

IF exposed or concerned: Get medical advice/ attention. Take off contaminated clothing and wash before reuse. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

## Storage:

Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.

noonoa ap.

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# Disposal:

Dispose of contents/ container to an approved waste disposal plant.

# Other hazards

None known.

# SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture

: Mixture

# **Hazardous components**

| Chemical Name   | CAS-No.  | Classification      | Concentration (%)  |
|-----------------|----------|---------------------|--------------------|
| CYCLOHEXYLAMINE | 108-91-8 | Flam. Liq. 3; H226  | >= 40.00 - < 50.00 |
|                 |          | Acute Tox. 4; H302  | 1                  |
|                 |          | Acute Tox. 3; H331  |                    |
|                 |          | Acute Tox. 3; H311  | ,                  |
|                 |          | Skin Corr. 1A; H314 |                    |
|                 |          | Eye Dam. 1; H318    |                    |
|                 |          | Repr. 2; H361       |                    |
|                 |          | STOT SE 3; H335     |                    |
|                 |          | ,                   |                    |
| MORPHOLINE      | 110-91-8 | Flam. Liq. 3; H226  | >= 40.00 - < 50.00 |
|                 |          | Acute Tox. 4; H302  |                    |
|                 |          | Acute Tox. 3; H311  |                    |
|                 |          | Skin Corr. 1A; H314 |                    |
|                 |          | Eye Dam. 1; H318    |                    |
|                 |          |                     |                    |

Trade Secret Composition - Conceal the Identity + Concentration

| _ | $\sim$ | -1/ | `  | 4  | <b>FIRST</b> | AID | BAL   | 401 | IDEC |
|---|--------|-----|----|----|--------------|-----|-------|-----|------|
| а | LΙ     | ı٤  | JΝ | 4. | LIKOL        | AIU | IVIE/ | 43L | ハトロン |

General advice

: Move out of dangerous area.

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Consult a physician.

Show this safety data sheet to the doctor in attendance. Symptoms of poisoning may appear several hours later.

Do not leave the victim unattended.

If inhaled

: Move to fresh air.

IF INHALED: Call a POISON CENTER or doctor/ physician if

you feel unwell.

Keep patient warm and at rest.

If unconscious place in recovery position and seek medical

advice.

In case of skin contact

: Take off contaminated clothing and shoes immediately.

If on skin, rinse well with water.

Wash contaminated clothing before re-use.

If on clothes, remove clothes.

In case of eye contact

: In the case of contact with eyes, rinse immediately with plenty

of water and seek medical advice.

Continue rinsing eyes during transport to hospital.

Remove contact lenses. Protect unharmed eye.

If swallowed

: Get medical attention immediately.

Do NOT induce vomiting. Rinse mouth with water.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician.

Most important symptoms and effects, both acute and delayed

: 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.

Pulmonary edema may be delayed.

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 nervousness

effects on blood pressure

chest pain

halo vision (blurred vision around bright objects)

loss of coordination

methemoglobinemia (blood abnormality which causes a blue

coloring to the skin)

lung edema (fluid buildup in the lung tissue)

Harmful if swallowed or if inhaled

Toxic in contact with skin.

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Causes serious eye damage. May cause respiratory irritation.

Suspected of damaging fertility or the unborn child.

Causes severe burns.

Notes to physician

: No hazards which require special first aid measures.

#### **SECTION 5. FIREFIGHTING MEASURES**

Suitable extinguishing media

: Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Water spray

Foam

Alcohol-resistant foam Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

: High volume water jet

Specific hazards during

firefighting

: Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite

explosively.

Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Do not allow run-off from fire fighting to enter drains or water

courses.

Hazardous combustion

products

: Ammonia

carbon dioxide and carbon monoxide

Cyanides toxic fumes

various hydrocarbons Nitrogen oxides (NOx)

formaldehyde

nitrogen compounds

Specific extinguishing

methods

Product is compatible with standard fire-fighting agents.

Further information

: Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations. Use a water spray to cool fully closed containers.

for firefighters

Special protective equipment : In the event of fire, wear self-contained breathing apparatus.

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#### SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Evacuate personnel to safe areas.
 Remove all sources of ignition.
 Use personal protective equipment.
 Ensure adequate ventilation.

Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Persons not wearing protective equipment should be excluded

from area of spill until clean-up has been completed.

Environmental precautions

: Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so.

If the product contaminates rivers and lakes or drains inform

respective authorities.

Methods and materials for containment and cleaning up

: Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to

local / national regulations (see section 13).

Other information

: Comply with all applicable federal, state, and local regulations. Suppress (knock down) gases/vapours/mists with a water

spray jet.

#### **SECTION 7. HANDLING AND STORAGE**

Advice on safe handling

: Open drum carefully as content may be under pressure.

Avoid formation of aerosol.

Provide sufficient air exchange and/or exhaust in work rooms.

Do not breathe vapours/dust.

Do not smoke.

Container hazardous when empty.

Take precautionary measures against static discharges. Avoid exposure - obtain special instructions before use.

Avoid contact with skin and eyes.

Smoking, eating and drinking should be prohibited in the

application area.

For personal protection see section 8.

Dispose of rinse water in accordance with local and national

regulations.

Conditions for safe storage

: Keep container tightly closed in a dry and well-ventilated

place.

Containers which are opened must be carefully resealed and

kept upright to prevent leakage. Observe label precautions.

No smoking.

Prevent unauthorized access.

Electrical installations / working materials must comply with

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the technological safety standards.

# SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

| Components      | CAS-No.  | Value type<br>(Form of<br>exposure) | Control parameters / Permissible concentration | Basis           |
|-----------------|----------|-------------------------------------|--|-----------------|
| CYCLOHEXYLAMINE | 108-91-8 | TWA                                 | 10 ppm   | PY OEL          |
|                 |          | TWA                                 | 10 ppm   | ACGIH           |
|                 |          | REL                                 | 10 ppm<br>40 mg/m3                             | NIOSH/GUID<br>E |
|                 |          | TWA                                 | 10 ppm<br>40 mg/m3                             | TN OEL          |
| MORPHOLINE      | 110-91-8 | TWA                                 | 20 ppm   | ACGIH           |
|                 |          | REL                                 | 20 ppm<br>70 mg/m3                             | NIOSH/GUID<br>E |
|                 |          | STEL                                | 30 ppm<br>105 mg/m3                            | NIOSH/GUID<br>E |
|                 |          | PEL                                 | 20 ppm<br>70 mg/m3                             | OSHA_TRA<br>NS  |
|                 |          | TWA                                 | 20 ppm<br>70 mg/m3                             | TN OEL          |
|                 |          | STEL                                | 30 ppm<br>105 mg/m3                            | TN OEL          |

### **Engineering measures**

 Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

#### Personal protective equipment

Respiratory protection

: A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by airpurifying respirators is limited. Use a positive pressure, airsupplied 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.

In the case of vapour formation use a respirator with an approved filter.

Hand protection Remarks

: The suitability for a specific workplace should be discussed

with the producers of the protective gloves.

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Eye protection

: Wear chemical splash goggles and face shield when there is

potential for exposure of the eyes or face to liquid, vapor or

mist

Maintain eye wash station in immediate work area.

Skin and body protection

: Wear resistant gloves (consult your safety equipment

supplier).

Wear as appropriate: impervious clothing Chemical resistant apron

Safety shoes

Flame-resistant clothing

Choose body protection according to the amount and concentration of the dangerous substance at the work place. Discard gloves that show tears, pinholes, or signs of wear.

Hygiene measures

: Avoid contact with skin, eyes and clothing.

Wash hands before breaks and immediately after handling the

product.

When using do not eat or drink.

Ensure that eyewash stations and safety showers are close to

the workstation location. When using do not smoke.

# **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical state

: liquid

Colour

: white, yellow

Odour

: No data available

Odour Threshold

: No data available

pΗ

: 11 - 14

Melting point/freezing point

: -53 °F / -47 °C

: 212 °F / 100 °C

(1,013 hPa)

Calculated Phase Transition Liquid/Gas

Flash point

: 113.0 °F / 45.0 °C

Evaporation rate

: No data available

Flammability (solid, gas)

: No data available

Upper explosion limit

: 11.2 %(V)

Lower explosion limit

Calculated Explosive Limit

1.4 %(V)

Calculated Explosive Limit

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Vapour pressure

: 23.33 hPa (20 °C)

Calculated Vapor Pressure

Relative vapour density

: > 1AIR=1

Relative density

: No data available

Density

: 0.965 - 0.980 g/cm3

Solubility(ies)

Water solubility

: No data available

Solubility in other solvents

: No data available

Partition coefficient: n-

octanol/water

: No data available

Thermal decomposition

: No data available

Viscosity

Viscosity, dynamic

: No data available

Viscosity, kinematic

: No data available

Oxidizing properties

: No data available

### **SECTION 10. STABILITY AND REACTIVITY**

Reactivity

: No decomposition if stored and applied as directed.

Chemical stability

: Stable under recommended storage conditions.

Possibility of hazardous

reactions

: Vapours may form explosive mixture with air.

Conditions to avoid

: Heat, flames and sparks.

Heat, flames and sparks.

Incompatible materials

Acids
 acrylates
 Alcohols
 Aldehydes
 aluminum
 Copper
 Copper alloys

Copper alloys galvanized metals

glycols

halogenated hydrocarbons

isocyanates Ketones

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Metals

nitrites and other nitrosating agents

organic anhydrides

phenols

Reducing agents Strong oxidizing agents

Zinc

Hazardous decomposition

products

Amines

carbon dioxide and carbon monoxide

Cyanides

formaldehyde-like nitrogen compounds Nitrogen oxides (NOx)

Ammonia

# **SECTION 11. TOXICOLOGICAL INFORMATION**

Information on likely routes of : Inhalation

exposure

Skin Absorption Skin contact

Eye Contact Ingestion

Acute toxicity

Harmful if swallowed or if inhaled Toxic in contact with skin.

Components:

CYCLOHEXYLAMINE:

Acute oral toxicity

: LD 50 (Rat): 432 mg/kg

Acute inhalation toxicity

: LC 50 (Rat): 7.5 mg/l

Exposure time: 4 h Test atmosphere: vapour

Acute dermal toxicity

: LD 50 (Rabbit); ca. 275 mg/kg

MORPHOLINE:

Acute oral toxicity

: LD50 (Rat): ca. 1,900 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity

: LC 50 (Rat): 8000 ppm

Exposure time: 8 h

Acute dermal toxicity

: LD 50 (Rabbit): ca. 500 mg/kg

Skin corrosion/irritation Causes severe burns.

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### **Product:**

Result: Causes severe burns.

Remarks: Causes severe skin burns and eye damage.

### Components:

CYCLOHEXYLAMINE:

Result: Corrosive after 3 minutes or less of exposure

MORPHOLINE:

Result: Corrosive after 3 minutes or less of exposure

### Serious eye damage/eye irritation

Causes serious eye damage.

Product:

Result: Causes severe burns.

Remarks: May cause irreversible eye damage.

# Components:

CYCLOHEXYLAMINE: Result: Corrosive to eyes

MORPHOLINE:

Result: Corrosive to eyes

## Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information. Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Components:

CYCLOHEXYLAMINE:

Genotoxicity in vitro

: Test Type: Ames test

Test species: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

: Test species: Chinese hamster ovary cells

Method: OPPTS 870.5300

Test species: rat hepatocytes Method: OPPTS 870.5550

MORPHOLINE:

Genotoxicity in vitro

: Test Type: unscheduled DNA synthesis assay

Test species: rat hepatocytes

Metabolic activation: without metabolic activation

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Method: OECD Test Guideline 482

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Test species: mouse lymphoma cells

Metabolic activation: without metabolic activation

Method: OECD Test Guideline 476

Result: positive

#### Carcinogenicity

Not classified based on available information.

# Reproductive toxicity

Suspected of damaging fertility or the unborn child.

### Components:

CYCLOHEXYLAMINE:

Reproductive toxicity -

: Suspected human reproductive toxicant

Assessment

### STOT - single exposure

May cause respiratory irritation.

# Components:

CYCLOHEXYLAMINE:

Exposure routes: Inhalation

Target Organs: Respiratory Tract

Assessment: May cause respiratory irritation.

## STOT - repeated exposure

Not classified based on available information.

# Aspiration toxicity

Not classified based on available information.

# **Further information**

### Product:

Remarks: Solvents may degrease the skin.

# Carcinogenicity:

IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed

human carcinogen by IARC.

**OSHA** 

No component of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential

carcinogen by OSHA.

NTP

No component of this product present at levels greater than or

equal to 0.1% is identified as a known or anticipated carcinogen

by NTP.

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#### **SECTION 12. ECOLOGICAL INFORMATION**

### **Ecotoxicity**

### Product:

Toxicity to fish

: LC 50 (Oncorhynchus mykiss (rainbow trout)): 141 mg/l

Exposure time: 96 h Test Type: static test

LC 50 (Pimephales promelas (fathead minnow)): 122 mg/l

Exposure time: 96 h Test Type: static test

Toxicity to daphnia and other

aquatic invertebrates

: LC 50 (Daphnia magna (Water flea)): 88.4 mg/l

Exposure time: 48 h Test Type: static test

#### Components:

CYCLOHEXYLAMINE:

Toxicity to fish

: LC50 (Oryzias latipes (Japanese medaka)): > 100 mg/l

Exposure time: 96 h

Test Type: flow-through test

Test substance: Neutralised product

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): 36.3 mg/l

Exposure time: 48 h

Test Type: static test

Method: OECD Test Guideline 202

GLP: yes

Toxicity to algae

: EC50 (Pseudokirchneriella subcapitata (green algae)): 29.3

mg/l

End point: Growth inhibition Exposure time: 72 h Test Type: static test

Method: OECD Test Guideline 201

GLP: yes

NOEC (Pseudokirchneriella subcapitata (green algae)): 10.3

mg/l

End point: Growth inhibition Exposure time: 72 h Test Type: static test

Method: OECD Test Guideline 201

GLP: yes

Toxicity to daphnia and other

aquatic invertebrates (Chronic toxicity)

: NOEC (Daphnia magna (Water flea)): 1.6 mg/l

Exposure time: 21 d

End point: Reproduction Test Test Type: semi-static test

Method: OECD Test Guideline 211

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GLP: yes

Toxicity to bacteria

: EC10 (activated sludge): 326 mg/l

Exposure time: 3 h Test Type: Static Method: ISO 8192

GLP:

# Persistence and degradability

Product:

Biochemical Oxygen

Demand (BOD)

: Biochemical oxygen demand within 5 days

615 mg/l

Chemical Oxygen Demand

(COD)

: 647 mg/l

Method: Chemical oxygen demand

Components:

CYCLOHEXYLAMINE:

Biodegradability

: Result: Readily biodegradable

Biodegradation: 92 % Exposure time: 20 d

Method: Directive 67/548/EEC Annex V, C.4.E.

MORPHOLINE:

Biodegradability

: Result: Readily biodegradable

Biodegradation: 92.6 % Exposure time: 22 d

Method: OECD Test Guideline 301E

# Bioaccumulative potential

Components:

CYCLOHEXYLAMINE:

Partition coefficient: n-

: log Pow: Calculated 1.49

octanol/water

MORPHOLINE:

Partition coefficient: n-

octanol/water

: log Pow: -0.86

Mobility in soil

Components:

No data available

Other adverse effects

No data available

Product:

Additional ecological

information

: No data available

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# Components:

# **SECTION 13. DISPOSAL CONSIDERATIONS**

### Disposal methods

General advice

Do not dispose of waste into sewer.

Do not contaminate ponds, waterways or ditches with

chemical or used container.

Send to a licensed waste management company.

Dispose of in accordance with all applicable local, state and

federal regulations.

Contaminated packaging

Empty remaining contents.

Dispose of as unused product.

Empty containers should be taken to an approved waste

handling site for recycling or disposal. Do not re-use empty containers.

Do not burn, or use a cutting torch on, the empty drum.

# **SECTION 14. TRANSPORT INFORMATION**

# International transport regulations

## **REGULATION**

| ID NU   | MBER     | PROPER SHIPPING NAME  | *HAZARD<br>CLASS | SUBSIDIARY<br>HAZARDS | PACKING<br>GROUP | MARINE<br>POLLUTANT /<br>LTD. QTY. |
|---------|----------|---|------------------|-----------------------|------------------|------------------------------------|
| U.S. D  | OT - RO  | AD  |                  |                       |                  |                                    |
| UN      | 2734     | Amines, liquid, corrosive, flammable, n.o.s. (CYCLOHEXYLAMINE, MORPHOLINE)          | 8                | (3)                   | []               |                                    |
| U.S. DO | T - RAIL |   |                  |                       |                  |                                    |
| UN      | 2734     | Amines, liquid, corrosive,<br>flammable, n.o.s.<br>(CYCLOHEXYLAMINE,<br>MORPHOLINE) | 8                | (3)                   | ll .             |                                    |

| U.S. | וטע | - INLAND | WAI |  |
|------|-----|----------|-----|--|
|      |     |          |     |  |

| UN | 2734 | Amines, liquid, corrosive, | 8 | (3) | ll l |  |
|----|------|----------------------------|---|-----|------|--|
|    |      | flammable, n.o.s.          |   | , , |      |  |
|    |      | (CYCLOHEXYLAMINE,          |   |     |      |  |
|    |      | MORPHOLINE)                |   |     |      |  |
|    |      | •                          |   |     |      |  |

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|-------------|-----------------|--|--------|---|---------------|-------------------|
| SAFE        | Strang honds Tr | ATA SHEET  |        |   | Revision      | Date: 05/23/2015  |
|             |                 |  |        |   | Prin          | t Date: 6/19/2015 |
|             |                 |  |        |   | SDS No        | ımber: R0002148   |
| ™ Trad      | lemark, S       | CORROSION INHIBITOR olenis or its subsidiaries or affiliates ous countries                 | S,     |   |               | Version: 1.2      |
|             |                 |  |        |   |               |                   |
|             |                 | NADA - ROAD  |        |   |               |                   |
| UN          | 2734            | AMINES, LIQUID,<br>CORROSIVE, FLAMMABLE,<br>N.O.S. (CYCLOHEXYLAMINE,<br>MORPHOLINE)        | 8      | (3)                                     | II            |                   |
| DANC!       | DODT CA         | NADA DAIL  |        | *************************************** | <del></del>   |                   |
| UN          | 2734            | NADA - RAIL  AMINES, LIQUID,  CORROSIVE, FLAMMABLE,  N.O.S. (CYCLOHEXYLAMINE,  MORPHOLINE) | 8      | (3)                                     | II            |                   |
|             | DODT 04         | NADA INI AND WATERWAYS   |        |   |               |                   |
| UN          | 2734            | MADA - INLAND WATERWAYS  AMINES, LIQUID,  CORROSIVE, FLAMMABLE,                            | 8      | (3)                                     | 11 .          |                   |
|             |                 | N.O.S. (CYCLOHEXYLAMINE, MORPHOLINE)   |        |   |               |                   |
|             |                 |  |        |   |               |                   |
| NTERN<br>UN | 2734            | L MARITIME DANGEROUS GOOD<br>AMINES, LIQUID,   | 8      | (3)                                     | ll l          |                   |
|             |                 | CORROSIVE, FLAMMABLE,<br>N.O.S. (CYCLOHEXYLAMINE,<br>MORPHOLINE)                           |        |   |               |                   |
|             |                 | AID TRANSPORT ASSOCIATIO   | N. CA  | DCO.                                    |               |                   |
| UN          | 2734            | Amines, liquid, corrosive, flammable, n.o.s.   | 8      | (3)                                     | ll l          |                   |
|             |                 | (CYCLOHEXYLAMINE,<br>MORPHOLINE)   |        |   |               |                   |
| NTERN       | IATIONAI        | L AIR TRANSPORT ASSOCIATIO   | N - PA | SSENGER                                 |               |                   |
| UN          | 2734            | Amines, liquid, corrosive,<br>flammable, n.o.s.<br>(CYCLOHEXYLAMINE,<br>MORPHOLINE)        | 8      | (3)                                     | 11            |                   |
|             |                 | LATION FOR THE LAND TRANS  | PORT   | OF HAZARDOUS                            | MATERIALS AND |                   |
| VASTE<br>UN | 2734            | AMINAS LIQUIDAS,   | 8      | (3)                                     | <u> </u>      |                   |
|             |                 | CORROSIVAS,<br>INFLAMABLES, N.E.P.<br>(CYCLOHEXYLAMINE,                                    |        |   |               |                   |
|             |                 | MORPHOLINE)  |        |   | •             |                   |

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|---|---------------------------|
| SAFETY DATA SHEET   | Revision Date: 05/23/2015 |
|   | Print Date: 6/19/2015     |
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# \*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

| Marine pollutant |   | no |   |
|------------------|---|----|---|
|                  | ļ |    | 1 |

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

## **SECTION 15. REGULATORY INFORMATION**

# **EPCRA - Emergency Planning and Community Right-to-Know Act**

### **CERCLA Reportable Quantity**

| Components | CAS-No. | Component RQ | Calculated product RQ |
|------------|---------|--------------|-----------------------|
|            |         | (lbs)        | (lbs)                 |
| BENZENE    | 71-43-2 | 10           | 500000                |

SARA 311/312 Hazards

Acute Health Hazard

Chronic Health Hazard

Fire Hazard

**SARA 313** 

Component(s)SARA 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis)

reporting levels established by SARA Title III, Section 313.

California Prop 65

Proposition 65 warnings are not required for this product

based on the results of a risk assessment.

The components of this product are reported in the following inventories:

**TSCA** 

: On TSCA Inventory

DSL

All components of this product are on the Canadian DSL.

**AUSTR** 

ENCS

: On the inventory, or in compliance with the inventory

KECL

: On the inventory, or in compliance with the inventory

: On the inventory, or in compliance with the inventory

PHIL

: On the inventory, or in compliance with the inventory

**IECSC** 

: On the inventory, or in compliance with the inventory

#### Inventories

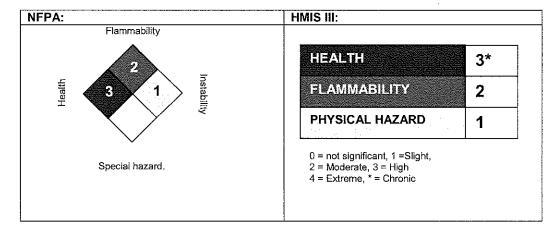
AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

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#### **SECTION 16. OTHER INFORMATION**

# Further information

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# NFPA Flammable and Combustible Liquids Classification

Combustible Liquid Class II

# Full text of H-Statements referred to under sections 2 and 3.

| H226 | Flammable liquid and vapor.                          |
|------|--|
| H302 | Harmful if swallowed.                                |
| H311 | Toxic in contact with skin.                          |
| H314 | Causes severe skin burns and eye damage.             |
| H318 | Causes serious eye damage.                           |
| H331 | Toxic if inhaled.                                    |
| H335 | May cause respiratory irritation.                    |
| H361 | Suspected of damaging fertility or the unborn child. |

Sources of key data used to compile the Safety Data Sheet

Key literature references and sources of data

SOLENIS Internal data

SOLENIS internal data including own and sponsored test reports

The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

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. This MSDS has been prepared by the Solenis Environmental Health and Safety Department.

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|---|---------------------------|
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List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data

sheet:

ACGIH: American Conference of Industrial Hygienists

BEI: Biological Exposure Index

CAS: Chemical Abstracts Service (Division of the American Chemical Society).

CMR: Carcinogenic, Mutagenic or Toxic for Reproduction

FG: Food grade

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

H-statement : Hazard Statement

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization

ICAO-TI (ICAO): Technical Instructions by the "International Civil Aviation Organization"

IMDG: International Maritime Code for Dangerous Goods

ISO: International Organization for Standardization

logPow: octanol-water partition coefficient

LCxx: Lethal Concentration, for xx percent of test population

LDxx: Lethal Dose, for xx percent of test population. ICxx: Inhibitory Concentration for xx of a substance

Ecxx: Effective Concentration of xx N.O.S.: Not Otherwise Specified

OECD: Organization for Economic Co-operation and Development

OEL: Occupational Exposure Limit
P-Statement: Precautionary Statement
PBT: Persistent, Bioaccumulative and Toxic

PPE: Personal Protective Equipment STEL: Short-term exposure limit STOT: Specific Target Organ Toxicity

TLV: Threshold Limit Value TWA: Time-weighted average

vPvB: Very Persistent and Very Bioaccumulative

WEL: Workplace Exposure Level

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act

DOT: Department of Transportation

FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act HMIRC: Hazardous Materials Information Review Commission

HMIS: Hazardous Materials Identification System

NFPA: National Fire Protection Association NIOSH: National Institute for Occupational Safety and Health

OSHA: National Institute for Occupational Safety and Health OSHA: Occupational Safety and Health Administration PMRA: Health Canada Pest Management Regulatory Agency

RTK: Right to Know

WHMIS: Workplace Hazardous Materials Information System