

SAFETY DATA SHEET

Revision Date: 05/02/2018

Print Date: 5/14/2018

SDS Number: R0352275

Version: 1.4

 Amercor™ 8548 CORROSION INHIBITOR
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SECTION 1. IDENTIFICATION
Product identifier

Trade name : Amercor™ 8548
 CORROSION INHIBITOR
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 registered in various countries

Recommended use of the chemical and restrictions on use

Details of the supplier of the safety data sheet Solenis LLC 500 Hercules Road Wilmington, Delaware 19808 United States of America (USA) RegulatoryRequestsNA@solenis.com	Emergency telephone number 1-844-SOLENIS (844-765-3647) Product Information Contact your local Solenis representative
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SECTION 2. HAZARDS IDENTIFICATION
GHS classification in accordance with 29 CFR 1910.1200

Flammable liquids : Category 4
 Skin corrosion : Category 1
 Serious eye damage : Category 1
 Reproductive toxicity : Category 2
 Specific target organ toxicity - single exposure : Category 3 (Respiratory system)

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H227 Combustible liquid.
 H314 Causes severe skin burns and eye damage.
 H335 May cause respiratory irritation.
 H361 Suspected of damaging fertility or the unborn child.

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Precautionary statements
Prevention:

P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
 P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
 P264 Wash skin thoroughly after handling.
 P271 Use only outdoors or in a well-ventilated area.
 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): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
 P305 + P351 + P338 + P310 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/doctor.
 P308 + P313 IF exposed or concerned: Get medical advice/ attention.
 P363 Wash contaminated clothing before reuse.
 P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
 P403 + P235 Store in a well-ventilated place. Keep cool.
 P405 Store locked up.

Disposal:

P501 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 Acute Tox. 4; H302 Acute Tox. 4; H312	>= 10 - < 15

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		Skin Corr. 1A; H314 Eye Dam. 1; H318 Repr. 2; H361	
2-diethylaminoethanol	100-37-8	Flam. Liq. 3; H226 Acute Tox. 4; H302 Acute Tox. 3; H331 Acute Tox. 3; H311 Skin Corr. 1B; H314 Eye Dam. 1; H318 STOT SE 3; H335	>= 10 - < 15
Morpholine	110-91-8	Flam. Liq. 3; H226 Acute Tox. 4; H302 Acute Tox. 4; H332 Acute Tox. 4; H312 Skin Corr. 1A; H314 Eye Dam. 1; H318	>= 5 - < 10

SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
Consult a physician.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.
- If inhaled : Move to fresh air.
IF INHALED: Call a POISON CENTER/doctor 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 : 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 : Overexposure to this product (or a component) may cause

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and effects, both acute and delayed

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)
 Difficulty in breathing
 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
 Carbon dioxide (CO2)
 Dry chemical
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : If product is heated above its flash point it will produce vapors sufficient to support combustion. Vapors are heavier than air and may travel along the ground and be ignited by heat, pilot lights, other flames and ignition sources at locations near the point of release.
 Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : Ammonia
 Carbon monoxide
 Carbon dioxide (CO2)
 Cyanides
 toxic fumes

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

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Remove all sources of ignition. Use personal protective equipment. Ensure adequate ventilation. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Comply with all applicable federal, state, and local regulations. Suppress (knock down) gases/vapours/mists with a water spray jet.
- 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). Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : 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.

No sparking tools should be used. Keep away from open flames, hot surfaces and sources of ignition.
- Advice on safe handling : Avoid formation of aerosol. Provide sufficient air exchange and/or exhaust in work rooms.

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Do not breathe vapours/dust.
 Do not smoke.
 Do not use sodium nitrite or other nitrosating agents in formulations containing this product. Suspected cancer-causing nitrosamines could be formed.
 When diluting, always add the product to water. Never add water to the product.
 Container hazardous when empty.
 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.
 Observe label precautions.
 No smoking.
 Electrical installations / working materials must comply with the technological safety standards.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
CYCLOHEXYLAMINE	108-91-8	TWA	10 ppm	ACGIH
		TWA	10 ppm 40 mg/m3	NIOSH REL
		TWA	10 ppm 40 mg/m3	OSHA P0
2-diethylaminoethanol	100-37-8	TWA	2 ppm	ACGIH
		TWA	10 ppm 50 mg/m3	NIOSH REL
		TWA	10 ppm 50 mg/m3	OSHA Z-1
		TWA	10 ppm 50 mg/m3	OSHA P0
Morpholine	110-91-8	TWA	20 ppm	ACGIH
		TWA	20 ppm 70 mg/m3	NIOSH REL
		ST	30 ppm 105 mg/m3	NIOSH REL
		TWA	20 ppm 70 mg/m3	OSHA Z-1
		TWA	20 ppm 70 mg/m3	OSHA P0

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		STEL	30 ppm 105 mg/m3	OSHA P0
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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 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.

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.

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
 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 : Wash hands before breaks and at the end of workday.
 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

Appearance : liquid

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Odour	:	No data available
Odour Threshold	:	No data available
pH	:	12.5
Melting point/freezing point	:	20 °F
Boiling point/boiling range	:	No data available
Flash point	:	61.11 °C Method: Pensky Martens closed cup
Evaporation rate	:	> 1 Ethyl Ether
Flammability (solid, gas)	:	No data available
Self-ignition	:	No data available
Upper explosion limit	:	No data available
Lower explosion limit	:	No data available
Vapour pressure	:	No data available
Relative vapour density	:	No data available
Relative density	:	No data available
Density	:	0.990 g/cm ³ (77.00 °F)
Solubility(ies)		
Water solubility	:	No data available
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Decomposition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Oxidizing properties	:	No data available

SECTION 10. STABILITY AND REACTIVITY

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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.

excessive heat
 Heat, flames and sparks.
 Exposure to moisture

Incompatible materials : Acids
 acrylates
 Alcohols
 Aldehydes
 aluminum
 Copper
 Copper alloys
 galvanized metals
 glycols
 halogenated hydrocarbons
 isocyanates
 Ketones
 Metals
 nitrates
 nitrites and other nitrosating agents
 organic anhydrides
 organic solvent
 peroxides
 phenols
 Reducing agents
 Strong oxidizing agents
 Zinc
 Aqueous solutions of this product corrode steel.

Hazardous decomposition products : **Amines**
Ammonia
Carbon monoxide
Carbon dioxide (CO₂)
Cyanides
Nitrogen oxides (NO_x)
nitrogen compounds

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : Acute toxicity estimate: 2,780 mg/kg
 Method: Calculation method

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Acute inhalation toxicity : Acute toxicity estimate: 32.46 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: 3,395 mg/kg
Method: Calculation method

Components:**CYCLOHEXYLAMINE:**

Acute oral toxicity : LD 50 (Rat): 432 mg/kg

Acute inhalation toxicity : Assessment: The substance or mixture has no acute
inhalation toxicity

Acute dermal toxicity : Assessment: The component/mixture is classified as acute
dermal toxicity, category 4.

2-diethylaminoethanol:

Acute oral toxicity : LD 50 (Rat): 1,320 mg/kg ca.

Acute inhalation toxicity : LC 50 (Rat): Approximate 4.6 mg/l
Exposure time: 4 h
Test atmosphere: vapour

Acute dermal toxicity : LD 50 (Guinea pig): ca. 885 mg/kg

Morpholine:

Acute oral toxicity : LD50 (Rat): ca. 1,900 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC 50 (Rat): 8 mg/l
Exposure time: 8 h
Test atmosphere: vapour
Assessment: The component/mixture is classified as acute
inhalation toxicity, category 4.

Acute dermal toxicity : LD 50 (Rabbit): ca. 500 mg/kg
Assessment: The component/mixture is classified as acute
dermal toxicity, category 4.

Skin corrosion/irritation

Causes severe burns.

Product:

Remarks: Causes severe skin burns and eye damage.

Components:**CYCLOHEXYLAMINE:**

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Result: Corrosive after 3 minutes or less of exposure

2-diethylaminoethanol:

Species: Rabbit

Result: Corrosive after 3 minutes to 1 hour of exposure

Morpholine:

Result: Corrosive after 3 minutes or less of exposure

Serious eye damage/eye irritation

Causes serious eye damage.

Product:

Remarks: May cause irreversible eye damage.

Components:**CYCLOHEXYLAMINE:**

Result: Corrosive to eyes

2-diethylaminoethanol:

Species: Rabbit

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.

Components:**2-diethylaminoethanol:**

Test Type: Maximisation Test

Species: Guinea pig


Method: OECD Test Guideline 406

Result: Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Not classified based on available information.

Components:**CYCLOHEXYLAMINE:**

 Strong bonds. Trusted solutions.		Page: 12
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Genotoxicity in vitro

- : Test Type: Ames test
Species: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
- : Species: Chinese hamster ovary cells
Method: OPPTS 870.5300
- : Species: rat hepatocytes
Method: OPPTS 870.5550

2-diethylaminoethanol:

Genotoxicity in vitro

- : Test Type: Ames test
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
- : Species: Chinese hamster lung cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative
GLP: yes

Genotoxicity in vivo

- : Test Type: In vivo micronucleus test
Species: Mouse
Method: OECD Test Guideline 474
Result: negative

Morpholine:

Genotoxicity in vitro

- : Test Type: unscheduled DNA synthesis assay
Species: rat hepatocytes
Metabolic activation: without metabolic activation
Method: OECD Test Guideline 482
Result: negative
- : Test Type: In vitro mammalian cell gene mutation test
Species: mouse lymphoma cells
Metabolic activation: without metabolic activation
Method: OECD Test Guideline 476
Result: positive

Carcinogenicity

Not classified based on available information.

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.

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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.

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:**2-diethylaminoethanol:**

Target Organs: Respiratory system
Assessment: May cause respiratory irritation.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

Product:

No aspiration toxicity classification

Further information**Product:**

Remarks: No data available

Components:**2-diethylaminoethanol:**

Remarks: Central nervous system

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Product:**

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 265 mg/l
aquatic invertebrates Exposure time: 48 h
Method: OECD Test Guideline 202

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GLP: no

Ecotoxicology Assessment

Acute aquatic toxicity : Not classified based on available information.

Chronic aquatic toxicity : Not classified based on available information.

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 productToxicity to daphnia and other : EC50 (*Daphnia magna* (Water flea)): 36.3 mg/l
aquatic invertebrates : Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202
GLP: yesToxicity 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: yesNOEC (*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: yesToxicity to daphnia and other : NOEC (*Daphnia magna* (Water flea)): 1.6 mg/l
aquatic invertebrates : End point: Reproduction Test
(Chronic toxicity) : Exposure time: 21 d
Test Type: semi-static test
Method: OECD Test Guideline 211
GLP: yesToxicity to microorganisms : EC10 (activated sludge): 326 mg/l
Exposure time: 3 h
Test Type: Static
Method: ISO 8192
GLP:**2-diethylaminoethanol:**Toxicity to fish : LC50 (*Leuciscus idus* (Golden orfe)): 147 mg/l

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Exposure time: 96 h
 Test Type: static test
 Method: DIN 38412

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 83.6 mg/l
 Exposure time: 48 h
 Test Type: static test
 Method: Directive 67/548/EEC, Annex V, C.2.

Toxicity to algae : NOEC (Desmodesmus subspicatus (green algae)): 5 mg/l
 End point: Growth inhibition
 Exposure time: 72 h
 Test Type: static test
 Method: DIN 38412

EC50 (Desmodesmus subspicatus (green algae)): 44 mg/l
 End point: Growth inhibition
 Exposure time: 72 h
 Test Type: static test
 Method: DIN 38412

Toxicity to microorganisms : EC20 (activated sludge): > 1,000 mg/l
 Exposure time: 30 min
 Method: OECD Test Guideline 209

Persistence and degradability

Components:

CYCLOHEXYLAMINE:

Biodegradability : Result: Readily biodegradable.
 Biodegradation: 92 %
 Exposure time: 20 d
 Method: Directive 67/548/EEC Annex V, C.4.E.

2-diethylaminoethanol:

Biodegradability : Result: Readily biodegradable.
 Biodegradation: 95 %
 Exposure time: 28 d
 Method: OECD Test Guideline 301A
 GLP: yes

Morpholine:

Biodegradability : Result: Readily biodegradable.
 Biodegradation: 92.6 %
 Exposure time: 22 d
 Method: OECD Test Guideline 301E

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Bioaccumulative potential

Components:

CYCLOHEXYLAMINE:

Partition coefficient: n-octanol/water : log Pow: Calculated 1.49

2-diethylaminoethanol:

Bioaccumulation : Bioconcentration factor (BCF): 0.85

Partition coefficient: n-octanol/water : log Pow: 0.21 (23 °C)
 Method: OECD Test Guideline 107

Morpholine:

Partition coefficient: n-octanol/water : log Pow: -0.86

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

- Waste from residues : 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 NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.

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U.S. DOT - ROAD

UN	2735	Amines, liquid, corrosive, n.o.s. (MORPHOLINE, CYCLOHEXYLAMINE)	8	III
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U.S. DOT - RAIL

UN	2735	Amines, liquid, corrosive, n.o.s. (MORPHOLINE, CYCLOHEXYLAMINE)	8	III
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U.S. DOT - INLAND WATERWAYS

UN	2735	Amines, liquid, corrosive, n.o.s. (MORPHOLINE, CYCLOHEXYLAMINE)	8	III
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TRANSPORT CANADA - ROAD

UN	2735	AMINES, LIQUID, CORROSIVE, N.O.S. (MORPHOLINE, CYCLOHEXYLAMINE)	8	III
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TRANSPORT CANADA - RAIL

UN	2735	AMINES, LIQUID, CORROSIVE, N.O.S. (MORPHOLINE, CYCLOHEXYLAMINE)	8	III
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INTERNATIONAL MARITIME DANGEROUS GOODS

UN	2735	AMINES, LIQUID, CORROSIVE, N.O.S. (MORPHOLINE, CYCLOHEXYLAMINE)	8	III
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INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

UN	2735	Amines, liquid, corrosive, n.o.s. (MORPHOLINE, CYCLOHEXYLAMINE)	8	III
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INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

UN	2735	Amines, liquid, corrosive, n.o.s. (MORPHOLINE, CYCLOHEXYLAMINE)	8	III
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MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES

SAFETY DATA SHEET

Revision Date: 05/02/2018

Print Date: 5/14/2018

SDS Number: R0352275

Version: 1.4

Amercor™ 8548 CORROSION INHIBITOR
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UN	2735	AMINES, LIQUID, CORROSIVE, N.O.S. (MORPHOLINE, CYCLOHEXYLAMINE)	8	III
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*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Marine pollutant	no
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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

SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
CYCLOHEXYLAMINE	108-91-8	10000	100000

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

Components	CAS-No.	Component TPQ (lbs)
CYCLOHEXYLAMINE	108-91-8	10000

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)
 Skin corrosion or irritation
 Serious eye damage or eye irritation
 Reproductive toxicity
 Specific target organ toxicity (single or repeated exposure)

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:

- DSL : All components of this product are on the Canadian DSL
- AICS : On the inventory, or in compliance with the inventory
- ENCS : On the inventory, or in compliance with the inventory
- KECI : On the inventory, or in compliance with the inventory

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- PICCS : On the inventory, or in compliance with the inventory
- IECSC : On the inventory, or in compliance with the inventory
- TCSI : On the inventory, or in compliance with the inventory
- TSCA : On TSCA Inventory

TSCA list

The following substance(s) is/are subject to a Significant New Use Rule:
 ETHYLENE GLYCOL MONOMETHYL ETHER 109-86-4

No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION

Further information

Revision Date: 05/02/2018

Full text of H-Statements

- H226 : Flammable liquid and vapour.
- H302 : Harmful if swallowed.
- H311 : Toxic in contact with skin.
- H312 : Harmful in contact with skin.
- H314 : Causes severe skin burns and eye damage.
- H318 : Causes serious eye damage.
- H331 : Toxic if inhaled.
- H332 : Harmful if inhaled.
- H335 : May cause respiratory irritation.
- H361 : Suspected of damaging fertility or the unborn child.


Full text of other abbreviations

- Acute Tox. : Acute toxicity
- Eye Dam. : Serious eye damage
- Flam. Liq. : Flammable liquids
- Repr. : Reproductive toxicity
- Skin Corr. : Skin corrosion
- STOT SE : Specific target organ toxicity - single exposure

Further information

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

Sources of key data used to compile the Safety Data Sheet
 Key literature references and sources of data
 SOLENIS Internal data

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SOLENIS internal data including own and sponsored test reports
 The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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