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SECTION 1. IDENTIFICATION

Product identifier

Trade name : BLACK ALGAETRINE ALGAECIDE

Recommended use of the chemical and restrictions on use

Use of the Substance/Mixture : Pesticide

<p>Details of the supplier of the safety data sheet Innovative Water Care, LLC D/B/A Applied Biochemists 1400 Bluegrass Lakes Parkway Alpharetta, GA 30004 United States of America (USA)</p> <p>EHSProductSafetyTeam@solenis.com</p>	<p>Emergency telephone number 1-800-654-6911 (Outside the USA:1-423-780-2970)</p> <p>Product Information 1-800-511-6737 (Outside the USA:1-423-780-2347)</p>
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SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids : Category 4

Acute toxicity (Oral) : Category 4

Skin corrosion : Category 1B

Serious eye damage : Category 1

Specific target organ toxicity - single exposure : Category 3 (Respiratory system)

GHS label elements

Hazard pictograms :




Signal word : Danger

Hazard statements : H227 Combustible liquid.
 H302 Harmful if swallowed.
 H314 Causes severe skin burns and eye damage.

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H335 May cause respiratory irritation.

Precautionary statements :

Prevention:

P210 Keep away from heat/ sparks/ open flames/ hot surfaces.
No smoking.

P261 Avoid breathing mist or vapours.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.

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.

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

Components

Chemical name	CAS-No.	Classification	Concentration (%)
ALKYL (C12-16) DIMETHYLBENZYL AMMONIUM CHLORIDE	68424-85-1	Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318	>= 20 - < 30

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TRIETHANOLAMINE	102-71-6	This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).	>= 5 - < 10
MONOETHANOLAMINE	141-43-5	Flam. Liq. 4; H227 Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318 STOT SE 3; H335	>= 5 - < 10
ETHANOL	64-17-5	Flam. Liq. 2; H225 Eye Irrit. 2A; H319	>= 1.5 - < 5

Actual concentration is withheld as a trade secret

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.
Keep patient warm and at rest.
If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.
- 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 and effects, both acute and : Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through

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delayed

the skin may include:
 stomach or intestinal upset (nausea, vomiting, diarrhea)
 irritation (nose, throat, airways)
 Cough
 Shortness of breath
 confusion
 irregular heartbeat
 lung edema (fluid buildup in the lung tissue)
 respiratory failure
 This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity when deciding whether to induce vomiting.
 Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material.
 Harmful if swallowed.
 Causes serious eye damage.
 May cause respiratory irritation.
 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 : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : Carbon monoxide
 Carbon dioxide (CO₂)
 Nitrogen oxides (NO_x)
 nitrogen oxides (NO_x)
 Ammonia
 formaldehyde-like
 Hydrocarbons
- 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.

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

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.
- 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 : Keep away from open flames, hot surfaces and sources of ignition.

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.
- Advice on safe handling : 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.
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

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place.
 Containers which are opened must be carefully resealed and kept upright to prevent leakage.
 Observe label precautions.
 No smoking.
 Electrical installations / working materials must comply with the technological safety standards.

Further information on storage stability : No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
TRIETHANOLAMINE	102-71-6	TWA	5 mg/m3	ACGIH
MONOETHANOLAMINE	141-43-5	TWA	3 ppm	ACGIH
		STEL	6 ppm	ACGIH
		TWA	3 ppm 8 mg/m3	NIOSH REL
		ST	6 ppm 15 mg/m3	NIOSH REL
		TWA	3 ppm 6 mg/m3	OSHA Z-1
		TWA	3 ppm 8 mg/m3	OSHA P0
		STEL	6 ppm 15 mg/m3	OSHA P0
ETHANOL	64-17-5	STEL	1,000 ppm	ACGIH
		TWA	1,000 ppm 1,900 mg/m3	NIOSH REL
		TWA	1,000 ppm 1,900 mg/m3	OSHA Z-1
		TWA	1,000 ppm 1,900 mg/m3	OSHA P0

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.

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Personal protective equipment

- Respiratory protection : In the case of vapour formation use a respirator with an approved filter.
- 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.
- 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 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.
Wear resistant gloves (consult your safety equipment supplier).
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
- Colour : dark blue
- Odour : No data available
- Odour Threshold : No data available

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pH	:	9.5 - 9.7
Melting point/freezing point	:	No data available
Boiling point/boiling range	:	No data available
Flash point	:	No data available
Evaporation rate	:	No data available
Flammability (solid, gas)	:	No data available
Self-ignition	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapour pressure	:	No data available
Relative vapour density	:	> 1
Relative density	:	1.049 (68 °F / 20 °C)
Density	:	No data available
Solubility(ies)		
Water solubility	:	soluble
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Decomposition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	34.5 mPa.s (68 °F / 20 °C)
Viscosity, kinematic	:	No data available
Oxidizing properties	:	No data available
Particle size	:	No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No decomposition if stored and applied as directed.
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- Chemical stability : Stable under recommended storage conditions.
- Possibility of hazardous reactions : Vapours may form explosive mixture with air.
- Conditions to avoid : This product should not be heated above 140 degrees F (60 degrees C) in the presence of aluminum due to excessive corrosion and potential chemical reaction releasing flammable hydrogen gas.
 excessive heat
 Protect from frost.
 Heat, flames and sparks.
 Exposure to air.
 Exposure to moisture
 Exposure to light.

 Heat, flames and sparks.
- Incompatible materials : Acids
 Aldehydes
 Alkali metals
 aluminum
 Ammonia
 Bases
 Copper
 Copper alloys
 galvanized metals
 halogenated hydrocarbons
 halogens
 inorganic materials
 Iron
 Ketones
 Metals
 nitrites
 organic anhydrides
 organic halides
 organic solvent
 Oxidizing agents
 Reducing agents
 sodium
 strong alkalis
 Zinc
- Hazardous decomposition products : Carbon monoxide
 Carbon dioxide (CO2)
 Nitrogen oxides (NOx)
 Ammonia
 Formaldehyde
 Hydrocarbons

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SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Harmful if swallowed.

Components:

ALKYL (C12-16) DIMETHYLBENZYL AMMONIUM CHLORIDE:

Acute oral toxicity : LD50 (Rat): 358 mg/kg

TRIETHANOLAMINE:

Acute oral toxicity : LD50 (Rat): 6,400 mg/kg

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg
Method: OECD Test Guideline 402

MONOETHANOLAMINE:

Acute oral toxicity : LD50 (Rat): 1,515 mg/kg

Acute inhalation toxicity : LC0 (Rat): ca. 1.3 mg/l
Exposure time: 6 h
Test atmosphere: vapour
Assessment: No adverse effect has been observed in acute inhalation toxicity tests.

Acute dermal toxicity : LD50 (Rabbit, male): 2,504 mg/kg
Method: OECD Test Guideline 402

LD50 (Rabbit, female): 2,881 mg/kg
Method: OECD Test Guideline 402

ETHANOL:

Acute oral toxicity : LD50 (Rat): 7,060 mg/kg

Acute inhalation toxicity : LC 50 (Rat): 117 - 125 mg/l
Exposure time: 4 h
Test atmosphere: vapour

LC 50 (Mouse): 39 mg/l
Exposure time: 4 h
Test atmosphere: vapour

Acute dermal toxicity : LDLo (Rabbit): 20 g/kg

Skin corrosion/irritation

Causes severe burns.

Product:

Remarks : Causes severe skin burns and eye damage.

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Components:

ALKYL (C12-16) DIMETHYLBENZYL AMMONIUM CHLORIDE:

Species : Rabbit
 Result : Causes burns.

TRIETHANOLAMINE:

Result : Mildly irritating to skin

MONOETHANOLAMINE:

Species : Rabbit
 Exposure time : 4 h
 Method : OECD Test Guideline 404
 Result : Causes burns.

ETHANOL:

Result : Slightly irritating to skin

Serious eye damage/eye irritation

Causes serious eye damage.

Product:

Remarks : May cause irreversible eye damage.

Components:

ALKYL (C12-16) DIMETHYLBENZYL AMMONIUM CHLORIDE:

Result : Corrosive to eyes

TRIETHANOLAMINE:

Result : Not irritating to eyes

MONOETHANOLAMINE:

Species : Rabbit
 Result : Corrosive to eyes

ETHANOL:

Result : Irritating to eyes

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

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Components:

TRIETHANOLAMINE:

Test Type : Maximisation Test
 Result : Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Not classified based on available information.

Components:

MONOETHANOLAMINE:

Genotoxicity in vitro : Test system: rat hepatocytes
 Method: OECD Test Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
 Result: negative

Test Type: Ames test
 Metabolic activation: with and without metabolic activation
 Method: OECD Test Guideline 471
 Result: negative

Test system: mouse lymphoma cells
 Metabolic activation: with and without metabolic activation
 Method: OECD Test Guideline 476
 Result: negative

Genotoxicity in vivo : Test Type: In vivo micronucleus test
 Species: Mouse
 Method: OECD Test Guideline 474
 Result: negative
 GLP: yes

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 on OSHA's list of regulated carcinogens.

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

Not classified based on available information.

STOT - single exposure

May cause respiratory irritation.

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Components:

MONOETHANOLAMINE:

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 : No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Ecotoxicology Assessment

Acute aquatic toxicity : Acute aquatic toxicity Category 1; Very toxic to aquatic life.

Chronic aquatic toxicity : Chronic aquatic toxicity Category 1; Very toxic to aquatic life with long lasting effects.

Components:

ALKYL (C12-16) DIMETHYLBENZYL AMMONIUM CHLORIDE:

Toxicity to fish : LC50 (Cyprinodon variegatus (sheepshead minnow)): 0.860 mg/l
 Exposure time: 96 h
 Test Type: flow-through test

LC50 (Oncorhynchus mykiss (rainbow trout)): 0.923 mg/l
 Exposure time: 96 h
 Test Type: flow-through test

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.016 mg/l
 Exposure time: 48 h
 Test Type: static test

Toxicity to algae/aquatic plants : ErC50 (Pseudokirchneriella subcapitata (algae)): 0.049 mg/l
 End point: Growth inhibition
 Exposure time: 72 h
 Test Type: static test
 Method: OECD Test Guideline 201
 GLP: yes

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M-Factor (Acute aquatic toxicity) : 10

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.00415 mg/l
 End point: Reproduction Test
 Exposure time: 21 d
 Analytical monitoring: yes
 GLP: yes

TRIETHANOLAMINE:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 11,800 mg/l
 Exposure time: 96 h
 Test Type: flow-through test

Toxicity to daphnia and other aquatic invertebrates : EC50 (Water flea (Ceriodaphnia dubia)): 609.88 mg/l
 Exposure time: 48 h
 Test Type: static test

EC50 (Daphnia magna (Water flea)): 2,038 mg/l
 Exposure time: 24 h
 Test Type: static test

Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): 216 - 512 mg/l
 Exposure time: 72 h
 Test Type: Growth inhibition

MONOETHANOLAMINE:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 114 - 196 mg/l
 Exposure time: 96 h
 Test Type: static test

LC50 (Cyprinus carpio (Carp)): 349 mg/l
 Exposure time: 96 h
 Test Type: semi-static test

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 65 mg/l
 Exposure time: 48 h
 Test Type: static test

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): 2.5 mg/l
 Exposure time: 72 h
 Test Type: Growth inhibition
 Method: OECD Test Guideline 201

Toxicity to fish (Chronic toxicity) : NOEC (Oryzias latipes (Orange-red killifish)): 1.24 mg/l
 Exposure time: 41 d

Toxicity to daphnia and other aquatic invertebrates : NOEC (Daphnia magna (Water flea)): 0.85 mg/l
 Exposure time: 21 d

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(Chronic toxicity)

Method: OECD Test Guideline 211

ETHANOL:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 12,000 - 16,000 mg/l
 Exposure time: 96 h
 Test Type: static test

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 10,000 mg/l
 Exposure time: 48 h
 Test Type: static test

Persistence and degradability

Components:

ALKYL (C12-16) DIMETHYLBENZYL AMMONIUM CHLORIDE:

Biodegradability : Result: Readily biodegradable.

TRIETHANOLAMINE:

Biodegradability : Result: Readily biodegradable.
 Biodegradation: 97 %
 Exposure time: 28 d

MONOETHANOLAMINE:

Biodegradability : Result: Readily biodegradable.
 Biodegradation: > 70 %
 Exposure time: 28 d
 Method: OECD Test Guideline 301F

Bioaccumulative potential

Components:

ALKYL (C12-16) DIMETHYLBENZYL AMMONIUM CHLORIDE:

Bioaccumulation : Species: Bluegill (Lepomis macrochirus)
 Bioconcentration factor (BCF): 80.4
 Exposure time: 60 d
 Concentration: 0.25 mg/l
 Method: Flow through

Species: Bluegill (Lepomis macrochirus)
 Bioconcentration factor (BCF): 33.3
 Exposure time: 60 d
 Concentration: 0.25 mg/l
 Method: Flow through

TRIETHANOLAMINE:

Partition coefficient: n-octanol/water : log Pow: -1.00

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MONOETHANOLAMINE:

Partition coefficient: n-octanol/water : log Pow: -1.91 (73 °F / 23 °C)
 pH: 7.3
 Method: OECD Test Guideline 107

ETHANOL:

Partition coefficient: n-octanol/water : log Pow: -0.31

Mobility in soil

No data available

Other adverse effects

Product:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
 Very toxic to aquatic life with long lasting effects.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : The product should not be allowed to enter drains, water courses or the soil.
 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 Regulations

IATA-DGR

UN number : UN 3267
 Proper shipping name : Corrosive liquid, basic, organic, n.o.s. (QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES)

 Class : 8

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Packing group : II
Packing instruction (cargo aircraft) : 855
Packing instruction (passenger aircraft) : 851

IMDG-Code

UN number : UN 3267
Proper shipping name : CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES)
Class : 8
Packing group : II
EmS Code : F-A, S-B
Marine pollutant : no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations

49 CFR

UN number : UN 3267
Proper shipping name : Corrosive liquid, basic, organic, n.o.s. (QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES)
Class : 8
Packing group : II
ERG Code : 153
Marine pollutant : no

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

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

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)
Acute toxicity (any route of exposure)
Skin corrosion or irritation
Serious eye damage or eye irritation

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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.

US State Regulations

Massachusetts Right To Know

TRIETHANOLAMINE	102-71-6
2-aminoethanol	141-43-5
ethanol	64-17-5

Pennsylvania Right To Know

WATER	7732-18-5
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	68424-85-1
TRIETHANOLAMINE	102-71-6
2-aminoethanol	141-43-5
Copper ethanolamine complex	14215-52-2
Copper triethanolamine complex	82027-59-6
ethanol	64-17-5

New Jersey Right To Know

WATER	7732-18-5
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	68424-85-1
TRIETHANOLAMINE	102-71-6
2-aminoethanol	141-43-5
Copper ethanolamine complex	14215-52-2
Copper triethanolamine complex	82027-59-6
ethanol	64-17-5

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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

TCSI	: Not in compliance with the inventory
AIIC	: Not in compliance with the inventory
DSL	: Exempt
ENCS	: Not in compliance with the inventory
KECI	: Not in compliance with the inventory
PICCS	: Not in compliance with the inventory
IECSC	: Not in compliance with the inventory

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TSCA list

Exempt- This product is exempt from Significant New Use Rule requirements. See information under Biocides for product registration information.”

Exempt-This product is exempt from TSCA 12(b) requirements. See information under Biocides for product registration information.”

Biocides

EPA Reg. # 8959-14

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

Danger, Corrosive., Causes irreversible eye damage and skin burns., Harmful if swallowed., May be fatal if absorbed through skin.

SECTION 16. OTHER INFORMATION

Further information

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Full text of H-Statements

H225 : Highly flammable liquid and vapour.
H227 : Combustible liquid.
H302 : Harmful if swallowed.
H314 : Causes severe skin burns and eye damage.
H318 : Causes serious eye damage.
H319 : Causes serious eye irritation.
H335 : May cause respiratory irritation.

Full text of other abbreviations

Acute Tox. : Acute toxicity
Eye Dam. : Serious eye damage
Eye Irrit. : Eye irritation
Flam. Liq. : Flammable liquids
Skin Corr. : Skin corrosion
STOT SE : Specific target organ toxicity - single exposure
ACGIH : USA. ACGIH Threshold Limit Values (TLV)
NIOSH REL : USA. NIOSH Recommended Exposure Limits
OSHA P0 : USA. Table Z-1-A Limits for Air Contaminants (1989 vacated values)
OSHA Z-1 : USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
ACGIH / TWA : 8-hour, time-weighted average
ACGIH / STEL : Short-term exposure limit
NIOSH REL / TWA : Time-weighted average concentration for up to a 10-hour

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workday during a 40-hour workweek

NIOSH REL / ST : STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday

OSHA P0 / TWA : 8-hour time weighted average

OSHA P0 / STEL : Short-term exposure limit

OSHA Z-1 / TWA : 8-hour time weighted average

AIIC - Australian Inventory of Industrial Chemicals; 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; TECI - Thailand Existing Chemicals 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

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 provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any

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other materials or in any process, unless specified in the text. This SDS has been prepared by the Solenis Environmental Health and Safety Department.

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