

SAFETY DATA SHEET

according to US Regulation 29 CFR 1910.1200 and the Canadian HPA

BARDAC 208M

Version 2.7

Revision Date 2020.05.04

Print Date 2020.05.04

SECTION 1. IDENTIFICATION

Commercial Product Name : BARDAC 208M
 Product name : BARDAC 208M
 PMRA Registration number : 21726

Manufacturer or supplier's details

Company : Lonza, LLC
 412 Mount Kemble Avenue, Suite 200S
 Morristown, NJ 07960
 USA

Telephone : 1-201-316-9200
 E-mail address : sds-info@lonza.com

Emergency telephone number : For incidents only (spill, leak, fire, exposure, or accident), call
 CHEMTREC at
 1-800-424-9300 (inside North America) [CCN 864796]
 1-703-741-5970 (outside North America) [CCN 864796]
 +41 61 313 94 94 (24h)

Recommended use of the chemical and restrictions on use

Recommended use : Cleaning/washing agents and disinfectants

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids : Category 3
 Acute toxicity (Oral) : Category 3
 Acute toxicity (Dermal) : Category 3
 Skin corrosion : Category 1A
 Serious eye damage : Category 1
 Short-term (acute) aquatic hazard : Category 1
 Long-term (chronic) aquatic hazard : Category 1

GHS label elements

Hazard pictograms :



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Signal word	: Danger
Hazard statements	: H226 Flammable liquid and vapour. H301 + H311 Toxic if swallowed or in contact with skin. H314 Causes severe skin burns and eye damage. H410 Very toxic to aquatic life with long lasting effects.
Precautionary statements	: Prevention: P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 Keep container tightly closed. P240 Ground and bond container and receiving equipment. P241 Use explosion-proof electrical/ ventilating/ lighting equipment. P242 Use non-sparking tools. P243 Take action to prevent static discharges. P264 Wash skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. Response: P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. 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. 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. P361 + P364 Take off immediately all contaminated clothing and wash it before reuse. P370 + P378 In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish. P391 Collect spillage. Storage: P403 + P235 Store in a well-ventilated place. Keep cool. P405 Store locked up. Disposal: P501 Dispose of contents/container in accordance with local regulation.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name / Synonyms	CAS-No.	Concentration (% w/w)
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Quaternary ammonium compounds, di-C8-10-alkyldimethyl, chlorides	68424-95-3	>= 30 - < 50
Alkyl (C12-16) dimethylbenzyl ammonium chloride	68424-85-1	>= 30 - < 50
Ethanol	64-17-5	>= 10 - < 15

SECTION 4. FIRST AID MEASURES

If inhaled	: Move to fresh air. If unconscious, place in recovery position and seek medical advice. If breathing is irregular or stopped, administer artificial respiration. Call a physician or poison control centre immediately. Keep respiratory tract clear.
In case of skin contact	: After contact with skin, wash immediately with plenty of soap and water. Take off contaminated clothing and shoes immediately. Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty. Take victim immediately to hospital.
In case of eye contact	: Rinse immediately with plenty of lukewarm water, also under the eyelids, for at least 15 minutes. Call a physician immediately. Remove contact lenses. Keep eye wide open while rinsing. Protect unharmed eye. Continue rinsing eyes during transport to hospital. Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
If swallowed	: Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Take victim immediately to hospital.
Most important symptoms and effects, both acute and delayed	: No information available.
Notes to physician	: Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	: Water spray Alcohol-resistant foam Dry chemical
Unsuitable extinguishing media	: High volume water jet
Specific hazards during firefighting	: Heating or fire can release toxic gas. Do not allow run-off from fire fighting to enter drains or water courses.

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Further information	: Use water spray to cool unopened containers. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Special protective equipment for firefighters	: In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Use personal protective equipment. Remove all sources of ignition. Evacuate personnel to safe areas. Use respirator when performing operations involving potential exposure to vapour of the product. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
Environmental precautions	: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so.
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). Non-sparking tools should be used.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	: Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges.
Advice on safe handling	: Avoid formation of aerosol. Do not breathe vapours/dust. Avoid contact with skin and eyes. Smoking, eating and drinking should be prohibited in the application area. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. To avoid spills during handling keep bottle on a metal tray. Dispose of rinse water in accordance with local and national regulations.
Conditions for safe storage	: Keep container tightly closed. Keep in a well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Electrical installations / working materials must comply with the technological safety standards. To maintain product quality, do not store in heat or direct sunlight. To prevent leaks or spillages from spreading, provide a suitable

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ble liquid retention system.
No smoking.

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
Ethanol	64-17-5	STEL	1,000 ppm	ACGIH
		REL	1,000 ppm 1,900 mg/m ³	NIOSH/GUIDE

Personal protective equipment

Respiratory protection : In the case of vapour formation use a respirator with an approved filter.
Respirator with ABEK filter.

Respirator with a vapour filter (EN 141)

Hand protection

Material : Nitrile rubber

Remarks : Wear protective gloves. Break through time : > 480 min

Eye protection : Safety glasses with side-shields conforming to EN166
Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Impervious clothing

Hygiene measures : Avoid contact with skin, eyes and clothing.
When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and immediately after handling the product.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : light yellow

Odour : mild

Odour Threshold : no data available

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pH	: 6.5 - 9.0 (77 °F / 25 °C) Concentration: 100 g/l
Melting point/range	: -9.9 °F / -23.3 °C
Boiling point/boiling range	: no data available
Flash point	: Does not sustain combustion according to ASTM 4206
Evaporation rate	: no data available
Flammability (solid, gas)	: no data available
Flammability (liquids)	: Does not sustain combustion.
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	: 0.93 g/cm ³ (77 °F / 25 °C)
Bulk density	: no data available
Water solubility	: soluble
Solubility in other solvents	: ca. 30 g/l Solvent: Ethanol ca. 70 g/l Solvent: Isopropanol
Partition coefficient: n-octanol/water	: no data available
Auto-ignition temperature	: no data available
Decomposition temperature	: no data available
Viscosity, dynamic	: 535 mPa.s (68 °F / 20 °C) Method: Brookfield
Viscosity, kinematic	: no data available
Explosive properties	: no data available
Oxidizing properties	: no data available
Surface tension	: 32 mN/m
Minimum ignition energy	: no data available

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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	: Stable under recommended storage conditions. Vapours may form explosive mixture with air.
Conditions to avoid	: Heat, flames and sparks.
Incompatible materials	: Strong acids and strong bases Oxidizing agents
Hazardous decomposition products	: No decomposition if used as directed.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Acute oral toxicity	: LD50 (Rat): 229 mg/kg Method: FIFRA
Acute inhalation toxicity	: Remarks: no data available
Acute dermal toxicity	: LD50 (Rabbit): 421 mg/kg GLP: yes

Skin corrosion/irritation

Species: Rabbit
Exposure time: 4 h
Method: DOT
Result: Corrosive
GLP: yes

Serious eye damage/eye irritation

Species: Rabbit
Result: Corrosive
Assessment: Risk of serious damage to eyes.
Method: DOT

Respiratory or skin sensitisation

Test Type: Buehler Test
Species: Guinea pig
Result: not sensitizing
GLP: yes

Germ cell mutagenicity

Genotoxicity in vitro	: Remarks: no data available
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Carcinogenicity

Result: no data available

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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.
ACGIH	Confirmed animal carcinogen with unknown relevance to humans Ethanol 64-17-5

Reproductive toxicity

Effects on fertility : Remarks: no data available

STOT - single exposure

Remarks: no data available

STOT - repeated exposure

Remarks: no data available

Aspiration toxicity

No aspiration toxicity classification

Further information

Remarks: Ingestion may cause nausea, vomiting, sore throat, stomach-ache and eventually lead to a perforation of the intestine.
Solvents may degrease the skin.

The following toxicological data refer to:

Didecyltrimethylammonium chloride(CAS-No.: 7173-51-5)

Acute toxicity

Acute oral toxicity : LD50 (Rat): 238 mg/kg
Method: OECD Test Guideline 401
GLP: yes

Acute dermal toxicity : LD50 (Rabbit): 3,342 mg/kg

Skin corrosion/irritation

Species: Rabbit
Exposure time: 3 min
Assessment: Causes burns.
Method: OECD Test Guideline 404
Result: Mild skin irritation
GLP: yes

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Respiratory or skin sensitisation

Test Type: Buehler Test
 Species: Guinea pig
 Assessment: Did not cause sensitisation on laboratory animals.
 Method: US-EPA
 Result: not sensitizing
 GLP: yes

Test Type: Buehler Test
 Species: Guinea pig
 Method: OECD Test Guideline 406
 Result: not sensitizing

Germ cell mutagenicity

Genotoxicity in vitro	: Test Type: Ames test Species: Salmonella typhimurium Metabolic activation: yes Method: OECD Test Guideline 471 Result: negative GLP: yes
	: Test Type: Chromosome aberration test in vitro Species: Chinese hamster ovary cells Metabolic activation: yes Result: negative GLP: yes
	: Test Type: gene mutation test Species: Chinese hamster ovary cells Metabolic activation: yes Result: negative GLP: yes
Genotoxicity in vivo	: Test Type: Chromosome aberration test in vivo Species: Rat Application Route: Oral Dose: 600 mg/kg Method: OECD Test Guideline 475 Result: negative GLP: yes

The following toxicological data refer to:

Alkyl (C12-16) dimethylbenzyl ammonium chloride(CAS-No.: 68424-85-1)

Acute toxicity

Acute oral toxicity	: LD50 (Rat): ca. 344 mg/kg GLP: no
Acute dermal toxicity	: LD50 (Rabbit, male and female): 3,412 mg/kg Method: OPPTS 870.1200 GLP: no

Skin corrosion/irritation

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Species: Rabbit
Exposure time: 4 h
Method: DOT
Result: Corrosive
GLP: no

Respiratory or skin sensitisation

Test Type: Buehler Test
Species: Guinea pig
Assessment: Did not cause sensitisation on laboratory animals.
Method: OECD Test Guideline 406
Result: not sensitizing
GLP: yes

Germ cell mutagenicity

Genotoxicity in vitro	<ul style="list-style-type: none"> : Test Type: Ames test Species: Salmonella typhimurium Metabolic activation: yes Method: OECD Test Guideline 471 Result: not mutagenic GLP: yes : Test Type: Chromosome aberration test in vitro Species: Human lymphocytes Metabolic activation: yes Method: OECD Test Guideline 473 Result: non clastogenic GLP: yes : Test Type: gene mutation test Species: Chinese hamster ovary cells Metabolic activation: yes Method: OECD Test Guideline 476 Result: not mutagenic GLP: yes : Test Type: unscheduled DNA synthesis assay Species: rat hepatocytes Method: OECD Test Guideline 482 Result: negative GLP: yes
Genotoxicity in vivo	<ul style="list-style-type: none"> : Test Type: In vivo micronucleus test Species: Mouse (male and female) Cell type: Bone marrow Application Route: oral (gavage) Method: OECD Test Guideline 474 Result: not mutagenic GLP: yes

Reproductive toxicity

Effects on fertility	<ul style="list-style-type: none"> : Test Type: Two-generation study Species: Rat, female Application Route: Ingestion Dose: 0-300-1000-2000 ppm General Toxicity - Parent: NOAEL: 67 - 106 mg/kg body weight General Toxicity F1: 54 - 86 mg/kg body weight
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General Toxicity F2: NOAEL: 54 - 86 mg/kg body weight
 Fertility: NOAEL: 112 - 161 mg/kg body weight
 Method: OECD Test Guideline 416
 Result: Animal testing did not show any effects on fertility.
 GLP: yes

Test Type: Two-generation study
 Species: Rat, male
 Application Route: Ingestion
 Dose: 0-300-1000-2000 ppm
 General Toxicity - Parent: NOAEL: 51 - 102 mg/kg body weight
 General Toxicity F1: NOAEL: 41 - 83 mg/kg body weight
 General Toxicity F2: NOAEL: 41 - 83 mg/kg body weight
 Fertility: NOAEL: 139 - 198 mg/kg body weight
 Method: OECD Test Guideline 416
 Result: Animal testing did not show any effects on fertility.
 GLP: yes

Effects on foetal development : Species: Rat
 Strain: Sprague-Dawley
 Application Route: Oral
 Dose: 0-10-30-100 milligram per kilogram
 General Toxicity Maternal: NOEL: 8.1 mg/kg bw/day
 Developmental Toxicity: NOAEL: 81 mg/kg body weight
 Method: OECD Test Guideline 414
 Result: No effects on fertility and early embryonic development were detected.
 GLP: yes

Repeated dose toxicity

Species: Dog, female
 NOAEL: 45 mg/kg
 Application Route: Dietary
 Exposure time: 90 d
 Number of exposures: daily
 Dose: 0-500-1500-3000 ppm

Species: Dog, male
 NOAEL: 50 mg/kg
 Application Route: Dietary
 Exposure time: 90 d
 Number of exposures: daily
 Dose: 0-500-1500-3000 ppm

Species: Rat, male
 NOAEL: 31 mg/kg
 Application Route: Dietary
 Exposure time: 90 d
 Number of exposures: daily
 Dose: 0-6-31-62 mg/kg
 Method: OECD Test Guideline 408
 GLP: yes

Species: Rat, female
 NOAEL: 38 mg/kg
 Application Route: Dietary
 Exposure time: 90 d
 Number of exposures: daily

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Dose: 0-8-38-77 mg/kg
Method: OECD Test Guideline 408
GLP: yes

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxicity to fish : Remarks: no data available

Persistence and degradability

Biodegradability : Test Type: Modified Sturm Test
Biodegradation: 99 %
Exposure time: 28 d
Method: US-EPA
GLP: yes

Bioaccumulative potential

Bioaccumulation : Remarks: no data available

Components:

Quaternary ammonium compounds, di-C8-10-alkyldimethyl, chlorides:

Partition coefficient: n-octanol/water : log Pow: 2.59 (20 °C)
pH: 7
Method: Calculation method

Alkyl (C12-16) dimethylbenzyl ammonium chloride:

Partition coefficient: n-octanol/water : log Pow: 2.75 (20 °C)
Method: OECD Test Guideline 107
GLP: yes

Ethanol:

Partition coefficient: n-octanol/water : log Pow: -0.3

Mobility in soil

Distribution among environmental compartments : Remarks: no data available

Other adverse effects

Ozone-Depletion Potential : Regulation: US. EPA Clean Air Act (CAA) Section 602 Ozone-Depleting Substances (40 CFR 82, Subpt. A, App A & B)
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

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

The following ecotoxicological data refer to:

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Didecyltrimethylammonium chloride(CAS-No.: 7173-51-5)

Ecotoxicity

Toxicity to fish	: LC50 (Pimephales promelas (fathead minnow)): 0.19 mg/l Exposure time: 96 h Analytical monitoring: yes Method: US-EPA GLP: yes
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): 0.062 mg/l Exposure time: 48 h Test Type: Immobilization Analytical monitoring: yes Method: EPA-FIFRA GLP: yes NOEC (Daphnia magna (Water flea)): 0.014 mg/l Exposure time: 21 d Remarks: Geometric mean of multiple studies of equivalent relevance/quality (EU Active Substance Assessment Report, June 2015).
Toxicity to algae	: ErC50 (Pseudokirchneriella subcapitata (green algae)): 0.026 mg/l Exposure time: 96 h Test Type: Growth inhibition Analytical monitoring: yes Method: OECD Test Guideline 201 GLP: yes
M-Factor (Acute aquatic toxicity)	: 10
Toxicity to fish (Chronic toxicity)	: NOEC (Danio rerio (zebra fish)): 0.032 mg/l Exposure time: 34 d Analytical monitoring: yes Method: OECD Test Guideline 210 GLP: yes
Toxicity to microorganisms	: EC50 (activated sludge): 11 mg/l Exposure time: 3 h Test Type: Respiration inhibition Method: OECD Test Guideline 209 GLP: yes
Toxicity to soil dwelling organisms	: Test Type: Acute toxicity NOEC (Eisenia fetida (earthworms)): >= 1,000 mg/kg Exposure time: 14 d Method: OECD Test Guideline 207 GLP: yes
Plant toxicity	: EC50: 283 - 1,670 mg/kg Exposure time: 14 d End point: Growth inhibition Method: OECD Test Guideline 208

Persistence and degradability

Biodegradability	: Test Type: Modified Sturm Test Concentration: 10 mg/l
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Result: Readily biodegradable.
Biodegradation: 72 %
Exposure time: 28 d
Method: OECD Test Guideline 301B
GLP: yes

Test Type: Die-Away Test
Concentration: 0.016 mg/l
Biodegradation: 93.3 %
Exposure time: 28 d
GLP: yes

Test Type: OECD Confirmatory Test
Biodegradation: 91 %
Exposure time: 24 - 70 d
Method: OECD Test Guideline 303A
GLP: no

Stability in water : Test Type: Abiotic degradation
Method: EPA-FIFRA
GLP: yes

Bioaccumulative potential

no data available

Mobility in soil

Distribution among environmental compartments : Mobile in soils
Method: US-EPA

Other adverse effects

no data available

The following ecotoxicological data refer to:

Alkyl (C12-16) dimethylbenzyl ammonium chloride(CAS-No.: 68424-85-1)

Ecotoxicity

Toxicity to fish : NOEC (Pimephales promelas (fathead minnow)): 0.0322 mg/l
Exposure time: 34 d
Test Type: Early-life Stage
Analytical monitoring: yes
Method: EPA-FIFRA
GLP: yes

NOEC (Lepomis macrochirus (Bluegill sunfish)): 0.456 mg/l
Exposure time: 96 h
Analytical monitoring: yes
Method: US-EPA
GLP: yes

LC50 (Lepomis macrochirus (Bluegill sunfish)): 0.515 mg/l
Exposure time: 96 h
Analytical monitoring: yes
Method: US-EPA
GLP: yes

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Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 0.016 mg/l Exposure time: 48 h Test Type: Immobilization Analytical monitoring: yes Method: OECD Test Guideline 202 GLP: yes
		NOEC (Daphnia magna (Water flea)): >= 0.00415 mg/l Exposure time: 21 d Test Type: Reproduction Test Analytical monitoring: yes Method: EPA-FIFRA GLP: yes
Toxicity to algae	:	ErC50 (Pseudokirchneriella subcapitata (green algae)): 0.049 mg/l Exposure time: 72 h Test Type: Cell multiplication inhibition test Analytical monitoring: yes Method: OECD Test Guideline 201 GLP: yes
		EC50 (Lemna gibba): 0.12 mg/l Exposure time: 7 d Test Type: Growth inhibition Analytical monitoring: yes Method: US-EPA
		ErC50 (algae): 0.089 mg/l Exposure time: 96 h Test Type: Growth inhibition Analytical monitoring: yes Method: US-EPA GLP: yes
M-Factor (Acute aquatic toxicity)	:	10
M-Factor (Chronic aquatic toxicity)	:	1
Toxicity to microorganisms	:	EC50 (activated sludge): 7.75 mg/l Exposure time: 3 h Test Type: Respiration inhibition Method: OECD Test Guideline 209 GLP: yes
Toxicity to soil dwelling organisms	:	Test Type: Acute toxicity LC50 (Eisenia fetida (earthworms)): 7,070 mg/kg Exposure time: 14 d Method: OECD Test Guideline 207
		Test Type: Soil Microflora EC50: > 1,000 mg/kg Exposure time: 28 d Method: OECD Test Guideline 216 GLP: yes
Plant toxicity	:	EC50: 277 - 1,900 mg/kg Exposure time: 14 d End point: Growth inhibition Method: OECD Test Guideline 208

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Persistence and degradability

Biodegradability	: Test Type: CO2 Evolution Test Concentration: 5 mg/l Result: Readily biodegradable. Biodegradation: 95.5 % Exposure time: 28 d Method: OECD Test Guideline 301B GLP: no
Stability in water	: Degradation half life: > 1 y (20 °C) pH: 7 Method: Directive 67/548/EEC, Annex V, C.10. GLP: yes

Bioaccumulative potential

Bioaccumulation	: Species: Lepomis macrochirus (Bluegill sunfish) Bioconcentration factor (BCF): 79 Exposure time: 35 d Concentration: 0.076 mg/l Method: US-EPA GLP: yes Remarks: Does not bioaccumulate.
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Mobility in soil

Distribution among environmental compartments	: Absorption / desorption Medium: Soil Koc: 282624 L/kgKd: 13,630, log Kd: 3.13 Method: OECD Test Guideline 106
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Other adverse effects

no data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues	: Dispose of contents/container in accordance with local regulation. Contact waste disposal services. Do not dispose of waste into sewer. The product should not be allowed to enter drains, water courses or the soil.
Contaminated packaging	: Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION

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DOT

UN number : 1903
Proper shipping name : Disinfectants, liquid, corrosive n.o.s.
 (Dialkyldimethylammonium chloride, Ethanol)
Transport hazard class : 8
Packing group : II
 Labels : 8
 Emergency Response Guidebook : 153
 Number
Environmental hazards : no

TDG

UN number : 2920
Proper shipping name : CORROSIVE LIQUID, FLAMMABLE, N.O.S.
 (Dialkyldimethylammonium chloride, Ethanol)
Transport hazard class : 8
Packing group : II
 Labels : 8 (3)
Environmental hazards : no

IATA

UN number : 2920
Proper shipping name : Corrosive liquid, flammable, n.o.s.
 (Dialkyldimethylammonium chloride, Ethanol)
Transport hazard class : 8
Packing group : II
 Labels : 8 (3)
Environmental hazards : no

IMDG

UN number : 2920
Proper shipping name : Corrosive liquid, flammable, n.o.s.
 (Dialkyldimethylammonium chloride, Ethanol)
Transport hazard class : 8
Packing group : II
 Labels : 8 (3)
 EmS Number 1 : F-E
 EmS Number 2 : S-C
Environmental hazards : Marine pollutant: yes

ADR

UN number : 2920
Proper shipping name : CORROSIVE LIQUID, FLAMMABLE, N.O.S.
 (Dialkyldimethylammonium chloride, Ethanol)
Transport hazard class : 8
Packing group : II
 Classification Code : CF1
 Hazard Identification Number : 83
 Labels : 8 (3)
Environmental hazards : yes

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RID

UN number	: 2920
Proper shipping name	: CORROSIVE LIQUID, FLAMMABLE, N.O.S. (Dialkyldimethylammonium chloride, Ethanol)
Transport hazard class	: 8
Packing group	: II
Classification Code	: CF1
Hazard Identification Number	: 83
Labels	: 8 (3)
Environmental hazards	: yes
 Special precautions for user	: none
 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	: Not applicable

SECTION 15. REGULATORY INFORMATION

This chemical is a pesticide product registered by the United States 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 (SDS), and for workplace labels of non-pesticide chemicals.

EPA Registration number	: 6836-67
Signal word	: DANGER!
Hazard statements	: Corrosive. Causes irreversible eye damage and skin burns. May be fatal if inhaled. May be fatal if swallowed. May be fatal if absorbed through skin. This pesticide is toxic to fish.

This chemical is a pest control product registered by Health Canada Pest Management Regulatory Agency and is subject to certain labelling requirements under the Pest Control Products Act. These requirements differ from the classification criteria and hazard information required for GHS-consistent safety data sheets. Following is the hazard information required on the pest control product label:

PMRA Registration number	: 21726
Hazard pictograms	:



Signal word	: DANGER!
Hazard statements	: Corrosive - causes irreversible eye damage. Harmful if swallowed. This pesticide is toxic to fish.

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

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ
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			(lbs)
Ethanol	64-17-5	100	1000

SARA 304 Extremely Hazardous Substances Reportable Quantity

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

SARA 311/312 Hazards

See above: SECTION 2. Hazard Identification-GHS Classification

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.

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489):

Components	CAS-No.	Concentration
Ethanol	64-17-5	>= 10 - < 20 %

This product does not contain any VOC exemptions listed under the U.S. Clean Air Act Section 450.

Clean Water Act

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations**Massachusetts Right To Know**

Components	CAS-No.
Ethanol	64-17-5

Pennsylvania Right To Know

Components	CAS-No.
Quaternary ammonium compounds, di-C8-10-alkyldimethyl, chlorides	68424-95-3

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Alkyl (C12-16) dimethylbenzyl ammonium chloride	68424-85-1
Ethanol	64-17-5
Water	7732-18-5

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.

Canadian lists

NPRI

Canadian National Pollutant Release Inventory (NPRI): No component is listed on NPRI.

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

ACGIH : US. ACGIH Threshold Limit Values
NIOSH/GUIDE : US. NIOSH: Pocket Guide to Chemical Hazards, as amended

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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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 other materials or in any process, unless specified in the text.

Date format : yyyy/mm/dd

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