PA16 - PATRIOT 16

SECTION 1: IDENTIFICATION

1.1 Product identifier: PA16 - PATRIOT 16

Other means of identification:

PA16
Use of Preparation: Disinfectant Cleaner

1.2 Recommended use of the chemical and restrictions on use:

Relevant uses (Consumer use): Cleaner
Relevant uses (Industrial user): Cleaner
Uses advised against: All uses not specified in this section or in section 7.3

1.3 Initial supplier identifier:

Parkside Professional Products Limited
4777 Kent Avenue
L2H 1J5 Niagara Falls - Ontario - Canada
Phone: 1 (877) 480-8127
info@parkside.com
https://www.parkside.com

1.4 Emergency phone number: 905-358-8364

SECTION 2: HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture:

WHMIS 2022:

Classification of this product has been carried out in accordance with Part 2 of Hazardous Products Regulations (SOR/2015-17 amended by SOR/2022-272)
Eye Dam. 1: Serious eye damage, Category 1, H318
Skin Corr. 1B: Skin corrosion, Category 1B, H314

2.2 Label elements:

WHMIS 2022:

Danger

Hazard statements:

Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.

Precautionary statements:

P101: If medical advice is needed, have product container or label at hand.
P102: Keep out of reach of children.
P264: Wash thoroughly after use.
P280: Wear protective gloves/protective clothing/eye protection/protective footwear.
P301+P330+P331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501: Dispose of contents and / or their container according to the separated collection system used in your municipality.

Substances that contribute to the classification

Alcohols, C12-14, ethoxylated; Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides; tetrasodium ethylene diamine tetraacetate; Dimethyldioctylammonium chloride

Additional labeling:

DANGER

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SECTION 2: HAZARD IDENTIFICATION (continued)

CCCR 2001 >> Sub-Category: "Corrosive"
CORROSIVE. CAUSES BURNS. Do not swallow. Do not get in eyes. Do not get on skin or clothing. Do not breathe fumes. Handle with care. Keep out of reach of children. Wear gloves and safety glasses. Use only in a well-ventilated area.
FIRST AID TREATMENT
If swallowed, call a Poison Control Centre or doctor immediately. Do not induce vomiting. If in eyes, rinse with water for 15 minutes. If on skin, rinse well with water. If on clothes, remove clothes. If breathed in, move person to fresh air.
Contains : Alcohols, C12-14, ethoxylated; Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides; tetrasodium ethylene diamine tetraacetate; Dimethyldioctylammonium chloride.

2.3 Health and physical hazards not otherwise classified (HHNOC - PHNOC):

Not relevant

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances:

Not relevant

3.2 Mixtures:

Chemical description: Chemical substance

Components:

In accordance with Schedule I of the Hazardous Products Regulations (SOR/2015-17), the product contains:

Identification	Chemical name/Classification	Concentration
CAS: 68439-50-9	**Alcohols, C12-14, ethoxylated** Acute Tox. 4: H302; Eye Dam. 1: H318 - Danger	**1 - <5%**
CAS: 68424-85-1	**Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides** Acute Tox. 4: H302+H312; Skin Corr. 1B: H314 - Danger	**1 - <5%**
CAS: 64-02-8	**tetrasodium ethylene diamine tetraacetate** Acute Tox. 4: H302; Eye Dam. 1: H318 - Danger	**1 - <5%**
CAS: 5538-94-3	**Dimethyldioctylammonium chloride** Acute Tox. 4: H302; Skin Corr. 1B: H314 - Danger	**1 - <5%**
CAS: 7173-51-5	**Didecyldimethylammonium chloride** Acute Tox. 3: H301; Eye Dam. 1: H318; Skin Corr. 1B: H314 - Danger	**1 - <5%**
CAS: 64-17-5	**ethanol** Eye Irrit. 2: H319; Flam. Liq. 2: H225 - Danger	**1 - <5%**

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

SECTION 4: FIRST-AID MEASURES

4.1 Description of necessary measures:

Request medical assistance immediately, showing the SDS of this product.

By inhalation:

This product does not contain substances classified as hazardous for inhalation, however, in case of symptoms of intoxication remove the person affected from the exposure area and provide with fresh air. Seek medical attention if the symptoms get worse or persist.

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, as this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

By ingestion/aspiration:

- CONTINUED ON NEXT PAGE -

SECTION 4: FIRST-AID MEASURES (continued)

Request immediate medical assistance, showing the SDS of this product. Do not induce vomiting, because its expulsion from the stomach can be hazardous to the mucus of the main digestive tract, and its inhalation, to the respiratory system. Rinse out the mouth and throat, as they may have been affected during ingestion. In the case of loss of consciousness do not administrate anything orally unless supervised by a doctor. Keep the person affected at rest.

4.2 Most important symptoms/effects, acute and delayed:

Acute and delayed effects are indicated in sections 2 and 11.

4.3 Indication of immediate medical attention and special treatment needed, if necessary:

Not relevant

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Suitable (and unsuitable) extinguishing media:

Suitable extinguishing media:

Product is non-flammable under normal conditions of storage, handling and use. In the case of combustion as a result of improper handling, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems.

Unsuitable extinguishing media:

Non-applicable

5.2 Specific hazards arising from the chemical:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Special protective equipment and precautions for fire-fighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and Self Contained Breathing Apparatus. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...)

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Destroy any source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflammation, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel:

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Remove any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

For emergency responders:

Wear protective equipment. Keep unprotected persons away. See section 8.

6.2 Environmental precautions:

This product is not classified as hazardous to the environment. Keep product away from drains, surface and underground water.

6.3 Methods and materials for containment and cleaning up:

It is recommended:

- CONTINUED ON NEXT PAGE -

SECTION 6: ACCIDENTAL RELEASE MEASURES (continued)

Prevent the entrance of product in drains, sewers or watercourses. Absorb the spill using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. Collect the product in appropriate containers and manage it according to current legislation.
Spillages in water or sea:
Small spillages:
Contain spillage using barriers or similar equipment. Use suitable absorbents for collection and treat the waste in accordance with current regulations.
Large spillages:
If possible, contain spillage in open water using barriers or similar equipment. If this is not possible, try to control its spread and collect the product with suitable mechanical means. Always consult experts before using dispersants and make sure you have the necessary approvals if they are to be used. Treat the waste according to current regulations.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- General precautions for safe use

Comply with the current legislation concerning the prevention of industrial risks with regards manually handling weights. Maintain order, cleanliness and dispose of using safe methods (section 6).

B.- Technical recommendations for the prevention of fires and explosions

Avoid the evaporation of the product as it contains flammable substances, which could form flammable vapour/air mixtures in the presence of sources of ignition. Control sources of ignition (mobile phones, sparks,...) and transfer at slow speeds to avoid the creation of electrostatic charges. Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations on general occupational hygiene

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

7.2 Conditions for safe storage, including any incompatibilities:

A.- Specific storage requirements

Minimum Temp.:	5 ºC
Maximum Temp.:	30 ºC
Maximum time:	6 Months

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be assessed in the workplace:

British Columbia - Occupational Health and Safety Regulation section 5.48 (Updated June 22, 2022):

Identification	Occupational exposure limits	
ethanol	TLV-TWA	
CAS: 64-17-5	TLV-STEL	1000 ppm

ALBERTA - Occupational Health and Safety Code:

Identification	Occupational exposure limits		
ethanol	8-hour	1000 ppm	1880 mg/m³
CAS: 64-17-5	15-minute		

8.2 Appropriate engineering controls:

- CONTINUED ON NEXT PAGE -

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

A.- Individual protection measures, such as personal protective equipment

As a preventative measure it is recommended to use basic Personal Protection Equipment. For more information on Personal Protection Equipment (storage, use, cleaning, maintenance, class of protection,…) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1.
All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

If the working conditions and/or safety measures adopted do not allow keeping the airborne concentration of the product below the exposure limits (if any) or at acceptable levels (if no exposure limits exist), suitable respiratory protection equipment chosen by a qualified professional should be used.

C.- Specific protection for the hands

Pictogram	PPE	Remarks
 Mandatory hand protection	Chemical protective gloves (Material: Nitrile, Breakthrough time: > 480 min)	Replace the gloves at any sign of deterioration.

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.

D.- Eye and face protection

Pictogram	PPE	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.	Clean daily and disinfect periodically according to the manufacturer´s instructions. Use if there is a risk of splashing.

E.- Bodily protection

Pictogram	PPE	Remarks
	Work clothing	Replace before any evidence of deterioration.
	Anti-slip work shoes	Replace before any evidence of deterioration.

F.- Additional emergency measures

It is advised to implement additional emergency equipments in workplaces that are particularly exposed to the product or in situations where risk assessments highlight the necessity of such equipments.

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

Environmental exposure controls:

To comply with environmental protection regulations, it is recommended to prevent any spillage of the product and its container. For more detailed information, please refer to subsection 7.1.D.

Volatile organic compounds (VOC) according to Canadian Environmental Protection Act, 1999:

Volatile organic compounds: 1.36 % weight

V.O.C. density at 20 ºC: 13.67 kg/m³ (13.67 g/L)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

*Not relevant due to the nature of the product, not providing information property of its hazards.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

Physical state at 20 ºC:	Liquid
Appearance:	Transparent
Colour:	Green
Odour:	Odourless
Odour threshold:	Not relevant *

Volatility:

Boiling point or initial boiling point and boiling range:	100 ºC
Vapour pressure at 20 ºC:	2379 Pa
Vapour pressure at 50 ºC:	12509.38 Pa (12.51 kPa)
Evaporation rate at 20 ºC:	Not relevant *

Product description:

Density at 20 ºC:	1007.7 kg/m³
Relative density at 20 ºC:	1.008
Dynamic viscosity at 20 ºC:	Not relevant *
Kinematic viscosity at 20 ºC:	Not relevant *
Kinematic viscosity at 40 ºC:	Not relevant *
Concentration:	Not relevant *
pH:	6 - 7
Relative vapour density at 20 ºC:	Not relevant *
Partition coefficient — n-octanol/water (logarithmic value) 20 ºC:	Not relevant *
Solubility in water at 20 ºC:	Not relevant *
Solubility properties:	Completely soluble
Decomposition temperature:	Not relevant *
Melting point/freezing point:	Not relevant *

Flammability:

Flash Point:	Non Flammable (>93 ºC)
Flammability (solid, gas):	Not relevant *
Autoignition temperature:	423 ºC
Lower flammability limit:	Not relevant *
Upper flammability limit:	Not relevant *

Particle characteristics:

Median equivalent diameter:	Not relevant *

9.2 Other information:

Information with regard to physical hazard classes:

Explosive properties:	Not relevant *
Oxidising properties:	Not relevant *
Corrosive to metals:	Not relevant *
Heat of combustion:	Not relevant *
Aerosols-total percentage (by mass) of flammable components:	Not relevant *

Other safety characteristics:

Surface tension at 20 ºC:	Not relevant *

*Not relevant due to the nature of the product, not providing information property of its hazards.

- CONTINUED ON NEXT PAGE -

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Refraction index:	Not relevant *
MIR (Maximum Incremental Reactivity):	Not relevant *

*Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7 from Safety Data Sheet.

10.2 Chemical stability:

Chemically stable under the indicated conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Precaution	Precaution	Not applicable

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Precaution	Not applicable	Avoid alkalis or strong bases

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO_2), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

The experimental information related to the toxicological properties of the product itself is not available

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than recommended by the occupational exposure limits, it may result in adverse effects on health depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: Corrosive product, if it is swallowed causes burns destroying the tissues. For more information about secondary effects from skin contact see section 2.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Prolonged inhalation of the product is corrosive to mucous membranes and the upper respiratory tract

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Above all, skin contact may occur as fabrics of all thicknesses can be destroyed, resulting in burns. For more information on the secondary effects see section 2.
- Contact with the eyes: Produces serious eye damage after contact.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for the effects mentioned. For more information see section 3.
  IARC: ethanol (1: Carcinogenic to humans)
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous with sensitising effects. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

Other information:

Not relevant

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides CAS: 68424-85-1	LD50 oral	344 mg/kg	Rat
	LD50 dermal	1100 mg/kg	Rat
	LC50 inhalation vapour		
Dimethyldioctylammonium chloride CAS: 5538-94-3	LD50 oral	500 mg/kg	
	LD50 dermal		
	LC50 inhalation vapour		
Didecyldimethylammonium chloride CAS: 7173-51-5	LD50 oral	238 mg/kg	Rat
	LD50 dermal	3342 mg/kg	Rabbit
	LC50 inhalation dust		
ethanol CAS: 64-17-5	LD50 oral	6200 mg/kg	Rat
	LD50 dermal	20000 mg/kg	Rabbit
	LC50 inhalation vapour	124.7 mg/L (4 h)	Rat
tetrasodium ethylene diamine tetraacetate CAS: 64-02-8	LD50 oral	1700 mg/kg	Rat
	LD50 dermal		
	LC50 inhalation dust		
Alcohols, C12-14, ethoxylated CAS: 68439-50-9	LD50 oral	500 mg/kg	
	LD50 dermal		
	LC50 inhalation vapour		

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

12.1 Ecotoxicity (aquatic and terrestrial, where available):

Acute toxicity:

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Concentration		Species	Genus
Alcohols, C12-14, ethoxylated	LC50	>10 - 100 mg/L (96 h)		Fish
CAS: 68439-50-9	EC50	>10 - 100 mg/L (48 h)		Crustacean
	EC50	>10 - 100 mg/L (72 h)		Algae
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	LC50	0.28 mg/L (96 h)	Pimephales promelas	Fish
CAS: 68424-85-1	EC50	Not relevant		
	EC50	Not relevant		
tetrasodium ethylene diamine tetraacetate	LC50	121 mg/L (96 h)	Lepomis macrochirus	Fish
CAS: 64-02-8	EC50	140 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	Not relevant		
Dimethyldioctylammonium chloride	LC50	>0.1 - 1 mg/L (96 h)		Fish
CAS: 5538-94-3	EC50	>0.1 - 1 mg/L (48 h)		Crustacean
	EC50	>0.1 - 1 mg/L (72 h)		Algae
Didecyldimethylammonium chloride	LC50	0.19 mg/L (96 h)	Danio rerio	Fish
CAS: 7173-51-5	EC50	0.062 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	0.021 mg/L (96 h)	Pseudokirchneriella subcapitata	Algae
ethanol	LC50	11000 mg/L (96 h)	Alburnus alburnus	Fish
CAS: 64-17-5	EC50	9268 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	1450 mg/L (192 h)	Microcystis aeruginosa	Algae

Chronic toxicity:

Identification	Concentration		Species	Genus
tetrasodium ethylene diamine tetraacetate	NOEC	25.7 mg/L	Danio rerio	Fish
CAS: 64-02-8	NOEC	25 mg/L	Daphnia magna	Crustacean
ethanol	NOEC	250 mg/L	Danio rerio	Fish
CAS: 64-17-5	NOEC	2 mg/L	Ceriodaphnia dubia	Crustacean

12.2 Persistence and degradability:

Substance-specific information:

Identification	Degradability		Biodegradability	
Didecyldimethylammonium chloride	BOD5	Not relevant	Concentration	4 mg/L
CAS: 7173-51-5	COD	Not relevant	Period	28 days
	BOD5/COD	Not relevant	% Biodegradable	69 %
ethanol	BOD5	Not relevant	Concentration	100 mg/L
CAS: 64-17-5	COD	Not relevant	Period	14 days
	BOD5/COD	Not relevant	% Biodegradable	89 %

12.3 Bioaccumulative potential:

Substance-specific information:

Identification	Bioaccumulation potential	
tetrasodium ethylene diamine tetraacetate	BCF	2
CAS: 64-02-8	Pow Log	-13
	Potential	Low
Didecyldimethylammonium chloride	BCF	2
CAS: 7173-51-5	Pow Log	2.8
	Potential	Low
ethanol	BCF	3
CAS: 64-17-5	Pow Log	-0.31
	Potential	Low

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
tetrasodium ethylene diamine tetraacetate	Koc	1046	Henry	0E+0 Pa·m³/mol
CAS: 64-02-8	Conclusion	Low	Dry soil	Not relevant
	Surface tension	Not relevant	Moist soil	Not relevant

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Absorption/desorption		Volatility	
Didecyldimethylammonium chloride	Koc	562314	Henry	Not relevant
CAS: 7173-51-5	Conclusion	Immobile	Dry soil	Not relevant
	Surface tension	Not relevant	Moist soil	Not relevant
ethanol	Koc	1	Henry	4.61E-1 Pa·m³/mol
CAS: 64-17-5	Conclusion	Very High	Dry soil	Yes
	Surface tension	2.339E-2 N/m (25 ºC)	Moist soil	Yes

12.5 Results of PBT and vPvB assessment:

Not relevant

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Disposal methods:

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations. In case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-hazardous residue. Waste should not be disposed of to drains. See epigraph 6.2.

Regulations related to waste management:

Legislation related to waste management:

Canadian Environmental Protection Act, 1999

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to Transportation of Dangerous Goods Regulations (SOR/2001-286) including Amendments:

14.1 UN number: UN1903

14.2 United Nations proper shipping name: DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides)

14.3 Transport hazard class(es): 8

Labels: 8

14.4 Packing group: III

14.5 Environmental hazard: No

14.6 Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises

Physico-Chemical properties: see section 9

14.7 Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not relevant

Transport of dangerous goods by sea:

With regard to IMDG 42-24:

- CONTINUED ON NEXT PAGE -

SECTION 14: TRANSPORT INFORMATION (continued)

14.1	**UN number:**	UN1903
14.2	**United Nations proper shipping name:**	DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides)
14.3	**Transport hazard class(es):**	8
	Labels:	8
14.4	**Packing group:**	III
14.5	**Marine pollutant:**	No
14.6	**Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises**	
	Special regulations:	274, 223
	EmS Codes:	F-A, S-B
	Physico-Chemical properties:	see section 9
	Limited quantities:	5 L
	Segregation group:	Not relevant
14.7	**Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code):**	Not relevant

Transport of dangerous goods by air:

With regard to IATA/ICAO 2026:

14.1	**UN number:**	UN1903
14.2	**United Nations proper shipping name:**	DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides)
14.3	**Transport hazard class(es):**	8
	Labels:	8
14.4	**Packing group:**	III
14.5	**Environmental hazard:**	No
14.6	**Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises**	
	Physico-Chemical properties:	see section 9
14.7	**Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code):**	Not relevant

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations specific for the product in question:

- Domestic Substances List (DSL): *Alcohols, C12-14, ethoxylated (68439-50-9)* ; *Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides (68424-85-1)* ; *tetrasodium ethylene diamine tetraacetate (64-02-8)* ; *Dimethyldioctylammonium chloride (5538-94-3)* ; *Didecyldimethylammonium chloride (7173-51-5)* ; *ethanol (64-17-5)*
- Export control list: Part 1: prohibited substances: Not relevant
- Export control list: Part 2: substances subject to notification or consent: Not relevant
- Export control list: Part 3: restricted substances: Not relevant
- First Priority Substances List (PSL1): Not relevant
- National Pollutant Release Inventory (NPRI) 2025- 2027 substance list: *ethanol (64-17-5)*
- Non-Domestic Substances List (NDSL): Not relevant
- Plan of Priorities (Substances identified as priorities for assessment): Not relevant
- Prohibition of Certain Toxic Substances Regulations, 2012: Not relevant
- Second Priority Substances List (PSL2): Not relevant
- Toxic substances list: Part 1: Not relevant
- Toxic substances list: Part 2: Not relevant
- Virtual Elimination List: Not relevant

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information provided in this safety data sheet as a foundation for conducting workplace-specific risk assessments. These assessments will help establish the appropriate risk prevention measures for handling, using, storing, and disposing of this product.

Other legislation:

Canadian Environmental Protection Act, 1999

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SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with Part 4 and Schedule I of the Hazardous Products Regulations (SOR/2015-17), amended by SOR/2020-38 and SOR/2022-272.

Texts of the legislative phrases mentioned in section 2:

H314: Causes severe skin burns and eye damage.
H318: Causes serious eye damage.

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

WHMIS 2022:

Acute Tox. 3: H301 - Toxic if swallowed.
Acute Tox. 4: H302 - Harmful if swallowed.
Acute Tox. 4: H302+H312 - Harmful if swallowed or in contact with skin.
Eye Dam. 1: H318 - Causes serious eye damage.
Eye Irrit. 2: H319 - Causes serious eye irritation.
Flam. Liq. 2: H225 - Highly flammable liquid and vapour.
Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.

Advice related to training:

Minimal training is recommended to prevent industrial risks for staff using this product, in order to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

http://whmis.org/

Abbreviations and acronyms:

IMDG: International maritime dangerous goods code
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
COD: Chemical Oxygen Demand BOD5: 5-day biochemical oxygen demand
BCF: Bioconcentration factor LD50: Lethal Dose 50 CL50: Lethal Concentration 50
EC50: Effective concentration 50
Log-POW: Octanol-water partition coefficient
Koc: Partition coefficient of organic carbon
IARC: International Agency for Research on Cancer

Date of compilation: 2026-04-24

END OF SAFETY DATA SHEET