



Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the DENR Administrative Order No. 2015-09 Rules and Procedures for the Implementation of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) in Preparation of Safety Data Sheet (SDS) and Labelling Requirements of Toxic Chemical Substances.

SECTION 1: Identification

1.1. Product identifier

3M™ Quat Disinfectant Cleaner Concentrate (Product No. 5, 3M(TM) Chemical Management Systems)

Product Identification Numbers

70-0716-5990-1

1.2. Recommended use and restrictions on use

Recommended use

Disinfectant, EPA-registered, quaternary disinfectant cleaner for use in hospitals.

1.3. Supplier's details

ADDRESS:	3M Philippines, Inc., 18th Floor, Bonifacio Stopover Corporate Center, 31st Street corner, 2nd Avenue, Bonifacio Global City, Taguig City, 1635 Philippines
Telephone:	+632 827 11680
E Mail:	mcvillalva@mmm.com
Website:	www.3m.com/ph

1.4. Emergency telephone number

+632 827 11680

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Flammable Liquid: Category 3.

Corrosive to metal: Category 1.

Acute Toxicity (oral): Category 4.

Acute Toxicity (inhalation): Category 3.

Skin Corrosion/Irritation: Category 1B.

Serious Eye Damage/Irritation: Category 1.

Specific Target Organ Toxicity (repeated exposure): Category 2.

Acute Aquatic Toxicity: Category 1.

Chronic Aquatic Toxicity: Category 1.

2.2. Label elements

Signal word

Danger

Symbols

Flame | Corrosion | Skull and crossbones | Health Hazard | Environment |

Pictograms



Hazard statements

H226	Flammable liquid and vapor.
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H331	Toxic if inhaled.
H314	Causes severe skin burns and eye damage.
H373	May cause damage to organs through prolonged or repeated exposure: respiratory system.
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.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P273	Avoid release to the environment.
P280D	Wear protective gloves, protective clothing, eye protection, and face protection.

Response:

P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or 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.
P310	Immediately call a POISON CENTER or doctor.
P370 + P378	In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

Storage:

P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
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Disposal:

P501	Dispose of contents and container in accordance with applicable local, regional, national, and international regulations.
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2.3. Other hazards

May cause chemical gastrointestinal burns. All or part of the classification is based on toxicity test data.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
WATER	7732-18-5	40 - 60
Quaternary Ammonium Compounds, DI-C8-10-Alkyldimethyl, Chlorides	68424-95-3	10 - 25
Alkyl C12-16 Dimethylbenzyl Ammonium Chloride	68424-85-1	10 - 20
Quaternium-24	32426-11-2	5 - 15
C12-15 Alcohols Ethoxylated	68131-39-5	1 - 10
Didecyldimonium Chloride	7173-51-5	1 - 10
Dimethyldioctylammonium Chloride	5538-94-3	1 - 10
Ethanol	64-17-5	1 - 10
SODIUM METASILICATE	6834-92-0	1 - 5
Tetrasodium EDTA	64-02-8	1 - 5
Pine Oil	8002-09-3	< 0.5

SECTION 4: First aid measures**4.1. Description of first aid measures****Inhalation:**

Remove person to fresh air. If you feel unwell, get medical attention.

Skin Contact:

Immediately flush with large amounts of water for at least 15 minutes. Remove contaminated clothing. Get immediate medical attention. Wash clothing before reuse.

Eye Contact:

Immediately flush with large amounts of water for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Immediately get medical attention.

If Swallowed:

Rinse mouth. Do not induce vomiting. Get immediate medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Skin burns (localized redness, swelling, itching, intense pain, blistering, and tissue destruction). Serious damage to the eyes (corneal cloudiness, severe pain, tearing, ulcerations, and significantly impaired or loss of vision). Target organ effects following prolonged or repeated exposure. See Section 11 for additional details.

4.3. Indication of any immediate medical attention and special treatment required

Not applicable.

SECTION 5: Fire-fighting measures**5.1. Suitable extinguishing media**

In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode.

5.3. Special protective actions for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering

for exposed areas of the head.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment based on the results of an exposure assessment. Refer to Section 8 for PPE recommendations. If anticipated exposure resulting from an accidental release exceeds the protective capabilities of the PPE listed in Section 8, or are unknown, select PPE that offers an appropriate level of protection. Consider the physical and chemical hazards of the material when doing so. Examples of PPE ensembles for emergency response could include wearing bunker gear for a release of flammable material; wearing chemical protective clothing if the spilled material is a corrosive, a sensitizer, a significant dermal irritant, or can be absorbed through the skin; or donning a positive pressure supplied-air respirator for chemicals with inhalation hazards. For information regarding physical and health hazards, refer to sections 2 and 11 of the SDS. Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode.

6.2. Environmental precautions

Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up

Contain spill. Cover spill area with a fire extinguishing foam that is resistant to polar solvents. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for use in transportation by appropriate authorities. The container must be lined with polyethylene plastic or contain a plastic drum liner made of polyethylene. Clean up residue with water. Cover, but do not seal for 48 hours. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

For industrial/occupational use only. Not for consumer sale or use. This product is not intended to be used without prior dilution as specified on the product label. Grounding or safety shoes with electrostatic dissipating soles (ESD) are not required with a chemical dispensing system. Keep out of reach of children. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Keep away from reactive metals (eg. Aluminum, zinc etc.) to avoid the formation of hydrogen gas that could create an explosion hazard. Wear low static or properly grounded shoes. Use personal protective equipment (gloves, respirators, etc.) as required. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapor accumulation. Ground/bond container and receiving equipment if there is potential for static electricity accumulation during transfer.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep cool. Keep container tightly closed. Keep only in original container. Store in a corrosive resistant container with a resistant inner liner. Store away from acids. Store away from oxidizing agents.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

No occupational exposure limit values exist for any of the components listed in Section 3 of this SDS.

8.2. Exposure controls

8.2.1. Engineering controls

NOTE: When used with a 3M branded chemical dispensing system, such as 3M(TM) Flow Control System or 3M(TM) Twist 'n Fill(TM) Cleaning Chemical Dispenser as directed, special ventilation is not required. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment. Use explosion-proof ventilation equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

NOTE: When used with a 3M branded chemical dispensing system, such as 3M(TM) Flow Control System or 3M(TM) Twist 'n Fill(TM) Cleaning Chemical Dispenser, as directed, eye contact with the concentrate is not expected to occur. The following protection(s) are recommended if the product is not used with a chemical dispensing system or if there is an accidental release, wear protective eye/face protection. Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Full Face Shield

Indirect Vented Goggles

Skin/hand protection

NOTE: When used with a 3M branded chemical dispensing system, such as 3M(TM) Flow Control System or 3M(TM) Twist 'n Fill(TM) Cleaning Chemical Dispenser as directed, skin contact with the concentrate is not expected to occur.

If product is not used with a chemical dispensing system or if there is an accidental release:

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing.

Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.

Gloves made from the following material(s) are recommended: Polymer laminate

If this product is used in a manner that presents a higher potential for exposure (e.g., spraying, high splash potential, etc.), then use of a protective apron may be necessary. See recommended glove material(s) for determining appropriate apron material(s). If a glove material is not available as an apron, polymer laminate is a suitable option.

Respiratory protection

NOTE: When used with a 3M branded chemical dispensing system, such as 3M(TM) Flow Control System or 3M(TM) Twist 'n Fill(TM) Cleaning Chemical Dispenser as directed, respiratory protection is not required.

If product is not used with a chemical dispensing system or if there is an accidental release:

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates

Half facepiece or full facepiece supplied-air respirator

Organic vapor cartridges may have short service life.

For questions about suitability for a specific application, consult with your respirator manufacturer.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Specific Physical Form:	Liquid
Color	Opalescent Green
Odor	Moderate Pine
Odor threshold	No Data Available
pH	12 - 13.5 Units not avail. or not appl.
Melting point/Freezing point	No Data Available
Boiling point/Initial boiling point/Boiling range	> 100 °C
Flash Point	51.7 °C [Test Method:Tagliabue Closed Cup] [Details:Does not sustain combustion according to ASTM 4206]
Evaporation rate	No Data Available
Flammability	Flammable Liquid: Category 3.
Flammable Limits(LEL)	No Data Available
Flammable Limits(UEL)	No Data Available
Relative Vapor Density	No Data Available
Density	1.001 - 1.009 g/ml
Relative Density	1.001 - 1.009 [Ref Std:WATER=1]
Water solubility	Complete
Solubility- non-water	No Data Available
Partition coefficient: n-octanol/ water	No Data Available
Autoignition temperature	No Data Available
Decomposition temperature	No Data Available
Kinematic Viscosity	No Data Available
Volatile Organic Compounds	3 - 7 % weight [Test Method:calculated per CARB title 2]
Percent volatile	< 70 % weight
VOC Less H2O & Exempt Solvents	100 - 140 g/l [Test Method:calculated per CARB title 2]
Molecular weight	No Data Available

Particle Characteristics	Not Applicable
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SECTION 10: Stability and reactivity

10.1. Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Not determined

10.5. Incompatible materials

Strong acids

10.6. Hazardous decomposition products

Substance

Carbon monoxide
Carbon dioxide
Oxides of Nitrogen

Condition

Not Specified
Not Specified
Not Specified

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May cause additional health effects (see below).

Skin Contact:

May be harmful in contact with skin.

Corrosive (Skin Burns): Signs/symptoms may include localized redness, swelling, itching, intense pain, blistering, ulceration, and tissue destruction.

Eye Contact:

Corrosive (Eye Burns): Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

Ingestion:

Harmful if swallowed. Gastrointestinal Corrosion: Signs/symptoms may include severe mouth, throat and abdominal pain; nausea; vomiting; and diarrhea; blood in the feces and/or vomitus may also be seen.

May cause additional health effects (see below).

Additional Health Effects:

Prolonged or repeated exposure may cause target organ effects:

Respiratory Effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish colored skin (cyanosis), sputum production, changes in lung function tests, and/or respiratory failure.

Reproductive/Developmental Toxicity:

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

Additional Information:

This product contains ethanol. Alcoholic beverages and ethanol in alcoholic beverages have been classified by the International Agency for Research on Cancer as carcinogenic to humans. There are also data associating human consumption of alcoholic beverages with developmental toxicity and liver toxicity. Exposure to ethanol during the foreseeable use of this product is not expected to cause cancer, developmental toxicity, or liver toxicity.

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >2,000 - =5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE >300 - =2,000 mg/kg
Quaternary Ammonium Compounds, DI-C8-10-Alkyldimethyl, Chlorides	Dermal	similar compounds	LD50 3,342 mg/kg
Quaternary Ammonium Compounds, DI-C8-10-Alkyldimethyl, Chlorides	Ingestion	similar compounds	LD50 238 mg/kg
Alkyl C12-16 Dimethylbenzyl Ammonium Chloride	Dermal	Rabbit	LD50 3,413 mg/kg
Alkyl C12-16 Dimethylbenzyl Ammonium Chloride	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.25 mg/l
Alkyl C12-16 Dimethylbenzyl Ammonium Chloride	Ingestion	Rat	LD50 398 mg/kg
Quaternium-24	Dermal		LD50 estimated to be > 5,000 mg/kg
Quaternium-24	Ingestion	Rat	LD50 > 5,000 mg/kg
Didecyldimonium Chloride	Dermal	Rabbit	LD50 3,328 mg/kg
Didecyldimonium Chloride	Ingestion	Rat	LD50 264 mg/kg
C12-15 Alcohols Ethoxylated	Ingestion	similar compounds	LD50 > 2,000 mg/kg
C12-15 Alcohols Ethoxylated	Dermal	similar health hazards	LD50 estimated to be > 5,000 mg/kg
Ethanol	Dermal	Rabbit	LD50 > 15,800 mg/kg
Ethanol	Inhalation-Vapor (4 hours)	Rat	LC50 124.7 mg/l
Ethanol	Ingestion	Rat	LD50 17,800 mg/kg
Dimethyldioctylammonium Chloride	Ingestion	Mouse	LD50 > 50 mg/kg
Dimethyldioctylammonium Chloride	Dermal	Rabbit	LD50 170 mg/kg
Tetrasodium EDTA	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 1.5 mg/l
Tetrasodium EDTA	Ingestion	Rat	LD50 1,658 mg/kg
SODIUM METASILICATE	Dermal	Rabbit	LD50 > 4,640 mg/kg
SODIUM METASILICATE	Ingestion	Rat	LD50 500 mg/kg
Pine Oil	Dermal	Rat	LD50 > 2,000 mg/kg
Pine Oil	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 4.76 mg/l
Pine Oil	Ingestion	Rat	LD50 > 2,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Overall product	In vitro data	Corrosive
Quaternary Ammonium Compounds, DI-C8-10-Alkyldimethyl, Chlorides	similar compounds	Corrosive
Alkyl C12-16 Dimethylbenzyl Ammonium Chloride	Rabbit	Corrosive
Didecyldimonium Chloride	Rabbit	Corrosive
C12-15 Alcohols Ethoxylated	Rabbit	Mild irritant
Ethanol	Rabbit	No significant irritation

Dimethyldioctylammonium Chloride	Rabbit	Corrosive
Tetrasodium EDTA	Rabbit	No significant irritation
SODIUM METASILICATE	Rabbit	Corrosive
Pine Oil	Rabbit	Irritant

Serious Eye Damage/Irritation

Name	Species	Value
Overall product	similar health hazards	Corrosive
Quaternary Ammonium Compounds, DI-C8-10-Alkyldimethyl, Chlorides	similar compounds	Corrosive
Alkyl C12-16 Dimethylbenzyl Ammonium Chloride	Rabbit	Corrosive
Didecyldimonium Chloride	Rabbit	Corrosive
C12-15 Alcohols Ethoxylated	similar compounds	No significant irritation
Ethanol	Rabbit	Severe irritant
Dimethyldioctylammonium Chloride	Rabbit	Corrosive
Tetrasodium EDTA	Rabbit	Corrosive
SODIUM METASILICATE	In vitro data	Corrosive
Pine Oil	Rabbit	Moderate irritant

Sensitization:
Skin Sensitization

Name	Species	Value
Quaternary Ammonium Compounds, DI-C8-10-Alkyldimethyl, Chlorides	similar compounds	Not classified
Alkyl C12-16 Dimethylbenzyl Ammonium Chloride	Guinea pig	Not classified
Didecyldimonium Chloride	Guinea pig	Not classified
C12-15 Alcohols Ethoxylated	similar compounds	Not classified
Ethanol	Human	Not classified
Dimethyldioctylammonium Chloride	similar compounds	Not classified
Tetrasodium EDTA	Human and animal	Not classified
SODIUM METASILICATE	Mouse	Not classified
Pine Oil	Human and animal	Not classified

Respiratory Sensitization

For the component/components, either no data are currently available or the data are not sufficient for classification.

Germ Cell Mutagenicity

Name	Route	Value
Quaternary Ammonium Compounds, DI-C8-10-Alkyldimethyl, Chlorides	In Vitro	Not mutagenic
Alkyl C12-16 Dimethylbenzyl Ammonium Chloride	In Vitro	Not mutagenic
Alkyl C12-16 Dimethylbenzyl Ammonium Chloride	In vivo	Not mutagenic
Didecyldimonium Chloride	In Vitro	Not mutagenic

Didecyldimonium Chloride	In vivo	Not mutagenic
C12-15 Alcohols Ethoxylated	In Vitro	Not mutagenic
Ethanol	In Vitro	Some positive data exist, but the data are not sufficient for classification
Ethanol	In vivo	Some positive data exist, but the data are not sufficient for classification
Dimethyldioctylammonium Chloride	In Vitro	Not mutagenic
Tetrasodium EDTA	In Vitro	Some positive data exist, but the data are not sufficient for classification
Tetrasodium EDTA	In vivo	Some positive data exist, but the data are not sufficient for classification
SODIUM METASILICATE	In Vitro	Not mutagenic
SODIUM METASILICATE	In vivo	Not mutagenic
Pine Oil	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Alkyl C12-16 Dimethylbenzyl Ammonium Chloride	Ingestion	Rat	Not carcinogenic
Didecyldimonium Chloride	Ingestion	Rat	Not carcinogenic
Ethanol	Ingestion	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
Tetrasodium EDTA	Ingestion	Multiple animal species	Not carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Alkyl C12-16 Dimethylbenzyl Ammonium Chloride	Ingestion	Not classified for female reproduction	Rat	NOAEL 48 mg/kg/day	2 generation
Alkyl C12-16 Dimethylbenzyl Ammonium Chloride	Ingestion	Not classified for male reproduction	Rat	NOAEL 30.5 mg/kg/day	2 generation
Alkyl C12-16 Dimethylbenzyl Ammonium Chloride	Ingestion	Not classified for development	Rat	NOAEL 48 mg/kg/day	2 generation
Didecyldimonium Chloride	Ingestion	Not classified for female reproduction	Rat	NOAEL 137 mg/kg/day	2 generation
Didecyldimonium Chloride	Ingestion	Not classified for male reproduction	Rat	NOAEL 109 mg/kg/day	2 generation
Didecyldimonium Chloride	Ingestion	Not classified for development	Rabbit	NOAEL 12 mg/kg/day	during gestation
C12-15 Alcohols Ethoxylated	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	premating into lactation
C12-15 Alcohols Ethoxylated	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	29 days
C12-15 Alcohols Ethoxylated	Ingestion	Not classified for development	Rat	NOAEL 300 mg/kg/day	premating into lactation
Ethanol	Inhalation	Not classified for development	Rat	NOAEL 38 mg/l	during gestation
Ethanol	Ingestion	Not classified for development	Rat	NOAEL 5,200 mg/kg/day	premating & during gestation
Dimethyldioctylammonium Chloride	Ingestion	Not classified for development	Rat	NOAEL 50 mg/kg/day	during organogenesis
Tetrasodium EDTA	Ingestion	Not classified for female reproduction	Rat	NOAEL 250 mg/kg/day	4 generation
Tetrasodium EDTA	Ingestion	Not classified for male reproduction	Rat	NOAEL 250 mg/kg/day	4 generation
Tetrasodium EDTA	Ingestion	Not classified for development	Rat	LOAEL 1,000 mg/kg/day	during gestation

SODIUM METASILICATE	Ingestion	Not classified for development	Mouse	NOAEL 200 mg/kg/day	during gestation
Pine Oil	Ingestion	Not classified for development	Rat	NOAEL 600 mg/kg/day	during gestation
Pine Oil	Ingestion	Not classified for female reproduction	Rat	NOAEL 250 mg/kg/day	premating into lactation
Pine Oil	Ingestion	Toxic to male reproduction	Rat	NOAEL 250 mg/kg/day	5 weeks

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Quaternary Ammonium Compounds, DI-C8-10-Alkyldimethyl, Chlorides	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
Alkyl C12-16 Dimethylbenzyl Ammonium Chloride	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not Available	
Didecyldimonium Chloride	Inhalation	respiratory irritation	May cause respiratory irritation	similar health hazards	NOAEL Not available	
C12-15 Alcohols Ethoxylated	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not Available	
Ethanol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	LOAEL 9.4 mg/l	not available
Ethanol	Inhalation	central nervous system depression	Not classified	Human and animal	NOAEL not available	
Ethanol	Ingestion	central nervous system depression	Not classified	Multiple animal species	NOAEL not available	
Ethanol	Ingestion	kidney and/or bladder	Not classified	Dog	NOAEL 3,000 mg/kg	
Dimethyldioctylammonium Chloride	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not Available	
Tetrasodium EDTA	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
SODIUM METASILICATE	Inhalation	respiratory irritation	May cause respiratory irritation	official classification	NOAEL Not available	
Pine Oil	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Alkyl C12-16 Dimethylbenzyl Ammonium Chloride	Ingestion	heart endocrine system gastrointestinal tract bone, teeth, nails, and/or hair hematopoietic system liver immune system nervous system eyes kidney and/or bladder respiratory system vascular system	Not classified	Rat	NOAEL 50 mg/kg/day	95 days

Didecylidimonium Chloride	Ingestion	gastrointestinal tract hematopoietic system immune system heart skin endocrine system bone, teeth, nails, and/or hair liver muscles nervous system eyes kidney and/or bladder respiratory system vascular system	Not classified	Rat	NOAEL 175 mg/kg/day	13 weeks
C12-15 Alcohols Ethoxylated	Ingestion	endocrine system gastrointestinal tract liver kidney and/or bladder hematopoietic system nervous system eyes	Not classified	Rat	NOAEL 1,000 mg/kg/day	13 weeks
Ethanol	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rabbit	LOAEL 124 mg/l	365 days
Ethanol	Inhalation	hematopoietic system immune system	Not classified	Rat	NOAEL 25 mg/l	14 days
Ethanol	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 8,000 mg/kg/day	4 months
Ethanol	Ingestion	kidney and/or bladder	Not classified	Dog	NOAEL 3,000 mg/kg/day	7 days
Tetrasodium EDTA	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	NOAEL 0.003 mg/l	13 weeks
Tetrasodium EDTA	Inhalation	liver heart skin endocrine system gastrointestinal tract bone, teeth, nails, and/or hair hematopoietic system immune system muscles nervous system eyes kidney and/or bladder vascular system	Not classified	Rat	NOAEL 0.015 mg/l	13 weeks
Tetrasodium EDTA	Ingestion	hematopoietic system liver	Not classified	Rat	NOAEL 2,500 mg/kg/day	13 weeks
Tetrasodium EDTA	Ingestion	heart gastrointestinal tract muscles kidney and/or bladder respiratory system	Not classified	Rat	NOAEL 5,000 mg/kg/day	13 weeks
SODIUM METASILICATE	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Dog	LOAEL 2,400 mg/kg/day	4 weeks
SODIUM METASILICATE	Ingestion	endocrine system blood	Not classified	Rat	NOAEL 804 mg/kg/day	3 months
SODIUM METASILICATE	Ingestion	heart liver	Not classified	Rat	NOAEL 1,259 mg/kg/day	8 weeks
Pine Oil	Inhalation	hematopoietic system eyes respiratory system	Not classified	Rat	NOAEL 2.23 mg/l	13 weeks
Pine Oil	Ingestion	liver kidney and/or bladder heart skin endocrine system gastrointestinal tract	Not classified	Rat	NOAEL 750 mg/kg/day	5 weeks

		bone, teeth, nails, and/or hair hematopoietic system immune system muscles nervous system respiratory system				
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Aspiration Hazard

For the component/components, either no data are currently available or the data are not sufficient for classification.

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. Additional information leading to material classification in Section 2 is available upon request. In addition, environmental fate and effects data on ingredients may not be reflected in this section because an ingredient is present below the threshold for labeling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

12.1. Toxicity**Acute aquatic hazard:**

GHS Acute 1: Very toxic to aquatic life.

Chronic aquatic hazard:

GHS Chronic 2: Toxic to aquatic life with long lasting effects

No product test data available

Material	Cas #	Organism	Type	Exposure	Test Endpoint	Test Result
Quaternary Ammonium Compounds, DI-C8-10-Alkyldimethyl, Chlorides	68424-95-3	Green algae	Analogous Compound	72 hours	ErC50	0.062 mg/l
Quaternary Ammonium Compounds, DI-C8-10-Alkyldimethyl, Chlorides	68424-95-3	Water flea	Analogous Compound	48 hours	EC50	0.029 mg/l
Quaternary Ammonium Compounds, DI-C8-10-Alkyldimethyl, Chlorides	68424-95-3	Zebra Fish	Analogous Compound	96 hours	LC50	0.049 mg/l
Quaternary Ammonium Compounds, DI-C8-10-Alkyldimethyl, Chlorides	68424-95-3	Green algae	Analogous Compound	72 hours	NOEC	0.013 mg/l
Quaternary Ammonium Compounds, DI-C8-10-Alkyldimethyl, Chlorides	68424-95-3	Water flea	Analogous Compound	21 days	NOEC	0.021 mg/l

Chlorides						
Quaternary Ammonium Compounds, DI-C8-10-Alkyldimethyl, Chlorides	68424-95-3	Activated sludge	Analogous Compound	3 hours	EC50	17.9 mg/l
Quaternary Ammonium Compounds, DI-C8-10-Alkyldimethyl, Chlorides	68424-95-3	Red Clover	Analogous Compound	14 days	EC50	106 mg/kg (Dry Weight)
Quaternary Ammonium Compounds, DI-C8-10-Alkyldimethyl, Chlorides	68424-95-3	Redworm	Analogous Compound	56 days	NOEC	125 mg/kg (Dry Weight)
Quaternary Ammonium Compounds, DI-C8-10-Alkyldimethyl, Chlorides	68424-95-3	Soil microbes	Analogous Compound	28 days	EC50	120 mg/kg (Dry Weight)
Alkyl C12-16 Dimethylbenzyl Ammonium Chloride	68424-85-1	Diatom	Experimental	96 hours	ErC50	0.089 mg/l
Alkyl C12-16 Dimethylbenzyl Ammonium Chloride	68424-85-1	Green algae	Experimental	72 hours	ErC50	0.049 mg/l
Alkyl C12-16 Dimethylbenzyl Ammonium Chloride	68424-85-1	Mysid Shrimp	Experimental	96 hours	LC50	0.092 mg/l
Alkyl C12-16 Dimethylbenzyl Ammonium Chloride	68424-85-1	Rainbow Trout	Experimental	96 hours	LC50	0.064 mg/l
Alkyl C12-16 Dimethylbenzyl Ammonium Chloride	68424-85-1	Sheepshead Minnow	Experimental	96 hours	LC50	0.86 mg/l
Alkyl C12-16 Dimethylbenzyl Ammonium Chloride	68424-85-1	Water flea	Experimental	48 hours	EC50	0.0058 mg/l
Alkyl C12-16 Dimethylbenzyl Ammonium Chloride	68424-85-1	Diatom	Experimental	96 hours	NOEC	0.035 mg/l
Alkyl C12-16 Dimethylbenzyl Ammonium Chloride	68424-85-1	Fathead Minnow	Experimental	28 days	NOEC	0.0322 mg/l
Alkyl C12-16 Dimethylbenzyl Ammonium Chloride	68424-85-1	Green algae	Experimental	72 hours	ErC10	0.009 mg/l
Alkyl C12-16 Dimethylbenzyl Ammonium Chloride	68424-85-1	Water flea	Experimental	21 days	NOEC	0.00415 mg/l
Alkyl C12-16 Dimethylbenzyl Ammonium Chloride	68424-85-1	Activated sludge	Experimental	3 hours	EC50	7.75 mg/l

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Alkyl C12-16 Dimethylbenzyl Ammonium Chloride	68424-85-1	Mustard	Experimental	16 days	EC50	277 mg/kg (Dry Weight)
Alkyl C12-16 Dimethylbenzyl Ammonium Chloride	68424-85-1	Redworm	Experimental	14 days	LC50	7,070 mg/kg (Dry Weight)
Alkyl C12-16 Dimethylbenzyl Ammonium Chloride	68424-85-1	Redworm	Experimental	56 days	NOEC	125 mg/kg (Dry Weight)
Alkyl C12-16 Dimethylbenzyl Ammonium Chloride	68424-85-1	Soil microbes	Experimental	28 days	EC50	130 mg/kg (Dry Weight)
Quaternium-24	32426-11-2	Green algae	Analogous Compound	72 hours	ErC50	0.062 mg/l
Quaternium-24	32426-11-2	Water flea	Analogous Compound	48 hours	EC50	0.029 mg/l
Quaternium-24	32426-11-2	Zebra Fish	Analogous Compound	96 hours	LC50	0.49 mg/l
Quaternium-24	32426-11-2	Green algae	Analogous Compound	72 hours	NOEC	0.013 mg/l
Quaternium-24	32426-11-2	Water flea	Analogous Compound	21 days	NOEC	0.021 mg/l
Quaternium-24	32426-11-2	Activated sludge	Analogous Compound	3 hours	EC50	17.9 mg/l
Quaternium-24	32426-11-2	Red Clover	Analogous Compound	14 days	EC50	106 mg/kg (Dry Weight)
Quaternium-24	32426-11-2	Redworm	Analogous Compound	56 days	NOEC	125 mg/kg (Dry Weight)
Quaternium-24	32426-11-2	Soil microbes	Analogous Compound	28 days	EC50	120 mg/kg (Dry Weight)
C12-15 Alcohols Ethoxylated	68131-39-5	Fish	Analogous Compound	96 hours	LC50	1 mg/l
C12-15 Alcohols Ethoxylated	68131-39-5	Green algae	Analogous Compound	72 hours	ErC50	0.57 mg/l
C12-15 Alcohols Ethoxylated	68131-39-5	Water flea	Analogous Compound	48 hours	LC50	0.1 mg/l
C12-15 Alcohols Ethoxylated	68131-39-5	Green algae	Analogous Compound	72 hours	NOEC	0.035 mg/l
Didecyldimonium Chloride	7173-51-5	Green algae	Experimental	72 hours	ErC50	0.062 mg/l
Didecyldimonium Chloride	7173-51-5	Water flea	Experimental	48 hours	EC50	0.029 mg/l
Didecyldimonium Chloride	7173-51-5	Zebra Fish	Experimental	96 hours	LC50	0.49 mg/l
Didecyldimonium Chloride	7173-51-5	Green algae	Experimental	72 hours	NOEC	0.013 mg/l
Didecyldimonium Chloride	7173-51-5	Midge	Experimental	28 days	NOEC	530 mg/kg (Dry Weight)
Didecyldimonium Chloride	7173-51-5	Water flea	Experimental	21 days	NOEC	0.018 mg/l
Didecyldimonium Chloride	7173-51-5	Zebra Fish	Experimental	34 days	NOEC	0.032 mg/l
Didecyldimonium Chloride	7173-51-5	Activated sludge	Experimental	3 hours	EC50	17.9 mg/l
Didecyldimonium Chloride	7173-51-5	Red Clover	Experimental	14 days	EC50	106 mg/kg (Dry Weight)
Didecyldimonium Chloride	7173-51-5	Redworm	Experimental	56 days	NOEC	125 mg/kg (Dry Weight)
Didecyldimonium Chloride	7173-51-5	Soil microbes	Experimental	28 days	EC50	120 mg/kg (Dry Weight)
Dimethyldioctylam monium Chloride	5538-94-3	Activated sludge	Analogous Compound	3 hours	EC50	11 mg/l
Dimethyldioctylam	5538-94-3	Rainbow Trout	Experimental	96 hours	LC50	0.35 mg/l

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monium Chloride						
Dimethyldioctylam monium Chloride	5538-94-3	Water flea	Experimental	48 hours	EC50	0.1 mg/l
Dimethyldioctylam monium Chloride	5538-94-3	Zebra Fish	Analogous Compound	34 days	NOEC	0.032 mg/l
Ethanol	64-17-5	Fathead Minnow	Experimental	96 hours	LC50	14,200 mg/l
Ethanol	64-17-5	Fish	Experimental	96 hours	LC50	11,000 mg/l
Ethanol	64-17-5	Green algae	Experimental	72 hours	EC50	275 mg/l
Ethanol	64-17-5	Water flea	Experimental	48 hours	LC50	5,012 mg/l
Ethanol	64-17-5	Green algae	Experimental	72 hours	ErC10	11.5 mg/l
Ethanol	64-17-5	Water flea	Experimental	10 days	NOEC	9.6 mg/l
SODIUM METASILICATE	6834-92-0	Green algae	Estimated	72 hours	EC50	>345.4 mg/l
SODIUM METASILICATE	6834-92-0	Zebra Fish	Experimental	96 hours	LC50	210 mg/l
SODIUM METASILICATE	6834-92-0	Green algae	Estimated	72 hours	EC10	34.5 mg/l
Tetrasodium EDTA	64-02-8	Bluegill	Experimental	96 hours	LC50	401.7 mg/l
Tetrasodium EDTA	64-02-8	Green algae	Experimental	72 hours	ErC50	>100 mg/l
Tetrasodium EDTA	64-02-8	Water flea	Experimental	24 hours	EC50	610 mg/l
Tetrasodium EDTA	64-02-8	Water flea	Analogous Compound	21 days	NOEC	25 mg/l
Tetrasodium EDTA	64-02-8	Zebra Fish	Analogous Compound	35 days	NOEC	35.1 mg/l
Tetrasodium EDTA	64-02-8	Green algae	Experimental	72 hours	ErC10	>100 mg/l
Tetrasodium EDTA	64-02-8	Plant	Analogous Compound	21 days	NOEC	84 mg/kg (Dry Weight)
Tetrasodium EDTA	64-02-8	Redworm	Analogous Compound	14 days	LC50	156.46 mg/kg (Dry Weight)
Tetrasodium EDTA	64-02-8	Activated sludge	Experimental	30 minutes	EC10	>1,000 mg/l
Pine Oil	8002-09-3	Activated sludge	Estimated	28 days	NOEC	25.7 mg/l
Pine Oil	8002-09-3	Green algae	Estimated	72 hours	EC50	68 mg/l
Pine Oil	8002-09-3	Rainbow Trout	Experimental	96 hours	LC50	18.4 mg/l
Pine Oil	8002-09-3	Water flea	Experimental	48 hours	EC50	24.5 mg/l
Pine Oil	8002-09-3	Green algae	Estimated	72 hours	NOEC	3.9 mg/l

12.2. Persistence and degradability

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Quaternary Ammonium Compounds, DI-C8-10-Alkyldimethyl, Chlorides	68424-95-3	Analogous Compound Aquatic Inherent Biodegrad.	28 days	Dissolv. Organic Carbon Deplet	80 %removal of DOC	EC C.9 Zhan-Wellens
Quaternary Ammonium Compounds, DI-C8-10-Alkyldimethyl, Chlorides	68424-95-3	Analogous Compound Biodegradation	28 days	Carbon dioxide evolution	71 %CO2 evolution/THCO2 evolution	OECD 301B - Mod. Sturm or CO2
Quaternary Ammonium Compounds, DI-C8-10-Alkyldimethyl, Chlorides	68424-95-3	Analogous Compound Biodegradation	59 days	Dissolv. Organic Carbon Deplet	≥99.95 %removal of DOC	OECD 303A - Simulated Aerobic
Quaternary Ammonium Compounds, DI-C8-10-Alkyldimethyl,	68424-95-3	Analogous Compound Soil Inherent Biodegradability	114 days	Carbon dioxide evolution	49 %CO2 evolution/THCO2 evolution	

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Chlorides						
Alkyl C12-16 Dimethylbenzyl Ammonium Chloride	68424-85-1	Experimental Biodegradation	28 days	Carbon dioxide evolution	95.5 %CO2 evolution/THCO2 evolution	OECD 301B - Mod. Sturm or CO2
Alkyl C12-16 Dimethylbenzyl Ammonium Chloride	68424-85-1	Experimental Hydrolysis		Hydrolytic half-life (pH 7)	>1 years (t 1/2)	EC C.7 Hydrolysis at pH
Quaternium-24	32426-11-2	Analogous Compound Aquatic Inherent Biodegrad.	28 days	Dissolv. Organic Carbon Deplet	80 %removal of DOC	EC C.9 Zhan-Wellens
Quaternium-24	32426-11-2	Analogous Compound Biodegradation	28 days	Carbon dioxide evolution	>67 %CO2 evolution/THCO2 evolution	OECD 301B - Mod. Sturm or CO2
Quaternium-24	32426-11-2	Analogous Compound Biodegradation	59 days	Dissolv. Organic Carbon Deplet	>99.95 %removal of DOC	OECD 303A - Simulated Aerobic
Quaternium-24	32426-11-2	Analogous Compound Soil Inherent Biodegradability	114 days	Carbon dioxide evolution	49 %CO2 evolution/THCO2 evolution	
C12-15 Alcohols Ethoxylated	68131-39-5	Analogous Compound Biodegradation	28 days	Carbon dioxide evolution	82 %CO2 evolution/THCO2 evolution	OECD 301B - Mod. Sturm or CO2
Didecylidimonium Chloride	7173-51-5	Experimental Aquatic Inherent Biodegrad.	28 days	Dissolv. Organic Carbon Deplet	80 %removal of DOC	EC C.9 Zhan-Wellens
Didecylidimonium Chloride	7173-51-5	Experimental Biodegradation	28 days	Carbon dioxide evolution	69 %CO2 evolution/THCO2 evolution	OECD 301B - Mod. Sturm or CO2
Didecylidimonium Chloride	7173-51-5	Experimental Biodegradation	59 days	Dissolv. Organic Carbon Deplet	>99.95 %removal of DOC	OECD 303A - Simulated Aerobic
Didecylidimonium Chloride	7173-51-5	Experimental Hydrolysis		Hydrolytic half-life (pH 7)	>1 years (t 1/2)	EC C.7 Hydrolysis at pH
Didecylidimonium Chloride	7173-51-5	Experimental Soil Inherent Biodegradability	114 days	Carbon dioxide evolution	49 %CO2 evolution/THCO2 evolution	
Dimethyldioctylammonium Chloride	5538-94-3	Experimental Biodegradation	28 days	Carbon dioxide evolution	86 %CO2 evolution/THCO2 evolution	OECD 301B - Mod. Sturm or CO2
Ethanol	64-17-5	Experimental Biodegradation	14 days	Biological Oxygen Demand	89 %BOD/ThOD	OECD 301C - MITI (I)
SODIUM METASILICATE	6834-92-0	Data not available - insufficient	N/A	N/A	N/A	N/A
Tetrasodium EDTA	64-02-8	Analogous Compound Biodegradation	28 days	Biological Oxygen Demand	2 %BOD/ThOD	OECD 301D - Closed Bottle Test
Tetrasodium EDTA	64-02-8	Experimental Aquatic Inherent Biodegrad.	28 days	Dissolv. Organic Carbon Deplet	<10 %removal of DOC	OECD 302B Zahn-Wellens/EVPA
Tetrasodium EDTA	64-02-8	Analogous Compound Soil Inherent Biodegradability	315 days	Carbon dioxide evolution	70.5 %CO2 evolution/THCO2 evolution	
Pine Oil	8002-09-3	Estimated Biodegradation	28 days	Biological Oxygen Demand	80 %BOD/COD	OECD 310 CO2 Headspace
Pine Oil	8002-09-3	Estimated Photolysis		Photolytic half-life (in air)	124 minutes (t 1/2)	

12.3. Bioaccumulative potential

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Quaternary Ammonium Compounds, DI-	68424-95-3	Analogous Compound BCF - Fish	60 days	Bioaccumulation Factor	<=95	OECD305-Bioconcentration

C8-10-Alkyldimethyl, Chlorides						
Quaternary Ammonium Compounds, DI-C8-10-Alkyldimethyl, Chlorides	68424-95-3	Analogous Compound Bioconcentration		Log of Octanol/H2O part. coeff	2.58	OECD 107 log Kow shke flask mtd
Alkyl C12-16 Dimethylbenzyl Ammonium Chloride	68424-85-1	Experimental BCF - Fish	35 days	Bioaccumulation Factor	79	
Alkyl C12-16 Dimethylbenzyl Ammonium Chloride	68424-85-1	Estimated Bioconcentration		Log of Octanol/H2O part. coeff	2.75	
Quaternium-24	32426-11-2	Analogous Compound BCF - Fish	60 days	Bioaccumulation Factor	<=95	OECD305-Bioconcentration
Quaternium-24	32426-11-2	Analogous Compound Bioconcentration		Log of Octanol/H2O part. coeff	2.58	OECD 107 log Kow shke flask mtd
C12-15 Alcohols Ethoxylated	68131-39-5	Modeled BCF - Fish		Bioaccumulation Factor	470	Catalogic™
C12-15 Alcohols Ethoxylated	68131-39-5	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	5.79	OECD 123 log Kow slow stir
Didecyltrimonium Chloride	7173-51-5	Experimental BCF - Fish	60 days	Bioaccumulation Factor	180	OECD305-Bioconcentration
Didecyltrimonium Chloride	7173-51-5	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	2.58	OECD 107 log Kow shke flask mtd
Dimethyldioctylammonium Chloride	5538-94-3	Analogous Compound BCF - Fish	60 days	Bioaccumulation Factor	≤95	OECD305-Bioconcentration
Ethanol	64-17-5	Experimental Bioconcentration		Log of Octanol/H2O part. coeff	-0.35	
SODIUM METASILICATE	6834-92-0	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Tetrasodium EDTA	64-02-8	Experimental BCF - Fish	28 days	Bioaccumulation Factor	1.8	
Tetrasodium EDTA	64-02-8	Analogous Compound Bioconcentration		Log of Octanol/H2O part. coeff	-4.3	
Pine Oil	8002-09-3	Estimated Bioconcentration		Log of Octanol/H2O part. coeff	3.28	

12.4. Mobility in soil

Please contact manufacturer for more details

12.5 Other adverse effects

No information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Incinerate in a permitted waste incineration facility. As a disposal alternative, utilize an acceptable permitted waste disposal facility. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical

substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

SECTION 14: Transport Information

Marine Transport (IMDG)

UN Number:UN1903

Proper Shipping Name:DISINFECTANT, LIQUID, CORROSIVE, N.O.S.

Technical Name:(BENZYL-C12-16-ALKYLDIMETHYL AMMONIUM CHLORIDES, SODIUM METASILICATE)

Hazard Class/Division:8

Subsidiary Risk:None assigned.

Packing Group:III

Limited Quantity:Yes

Marine Pollutant: None assigned.

Marine Pollutant Technical Name: None assigned.

Other Dangerous Goods Descriptions:

None assigned.

Air Transport (IATA)

UN Number:UN1903

Proper Shipping Name:DISINFECTANT, LIQUID, CORROSIVE, N.O.S.

Technical Name:(BENZYL-C12-16-ALKYLDIMETHYL AMMONIUM CHLORIDES, SODIUM METASILICATE)

Hazard Class/Division:8

Subsidiary Risk:None assigned.

Packing Group:III

Limited Quantity:None assigned.

Marine Pollutant: None assigned.

Marine Pollutant Technical Name: None assigned.

Other Dangerous Goods Descriptions:

None assigned.

Transportation classifications are provided as a customer service. As for shipping, YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M's transportation classifications are based on product formulation, packaging, 3M policies and 3M's understanding of applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and not the packaging, labeling or marking requirements. The above information is only for reference. If you are shipping by air or ocean, YOU are advised to check & meet applicable regulatory requirements.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Global inventory status

Contact 3M for more information. The components of this material are in compliance with the provisions of the Korea Chemical Control Act. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Japan Chemical Substance Control Law. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Philippines RA 6969 requirements. Certain restrictions may apply. Contact the selling division for additional information. The components of this product are in compliance with the new substance notification requirements of CEPA. This product complies with Measures on Environmental Management of New Chemical

Substances. All ingredients are listed on or exempt from on China IECSC inventory.

SECTION 16: Other information

Revision information:

No revision information

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications.

3M Philippines SDSs are available at www.3m.com/ph