



Safety Data Sheet

Issue Date: 27-Dec-2011

Revision Date: 22-Dec-2017

Version 3

1. IDENTIFICATION

Product Identifier

Product Name Symmetry Foaming Hand Sanitizer

Other means of identification

SDS # BE-9005

Product Code 9005

UN/ID No UN1170

Recommended use of the chemical and restrictions on use

Recommended Use Hand Sanitizer.

Details of the supplier of the safety data sheet

Supplier Address

Buckeye International, Inc.
2700 Wagner Place
Maryland Heights, MO 63043 USA

Emergency Telephone Number

Company Phone Number 1-314-291-1900

Emergency Telephone (24 hr) Transportation - INFOTRAC 1-352-323-3500 (International)

1-800-535-5053 (North America)

Medical - (International) 1-651-632-8956 (North America) 1-800-303-0441

2. HAZARDS IDENTIFICATION

Appearance Clear liquid

Physical state Liquid

Odor Fruity Floral

Classification

Serious eye damage/eye irritation

Category 2

Flammable Liquids

Category 3

Signal Word

Danger

Hazard statements

Causes serious eye irritation

Flammable liquid and vapor



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
 Wear protective gloves/protective clothing/eye protection/face protection
 Keep away from heat/sparks/open flames/hot surfaces. — No smoking
 Keep container tightly closed
 Ground/bond container and receiving equipment
 Use explosion-proof equipment
 Use only non-sparking tools
 Take precautionary measures against static discharge

Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 If eye irritation persists: Get medical advice/attention
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 In case of fire: Use CO₂, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store locked up
 Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other hazards

Toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%
Ethyl Alcohol	64-17-5	65.26

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First Aid Measures

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician if irritation persists.
Skin Contact	If skin irritation occurs, rinse affected area with water.
Inhalation	Remove to fresh air.
Ingestion	Drink 2-3 large glasses of water. Do NOT induce vomiting. Call a physician. Never give anything by mouth to an unconscious person.

Most important symptoms and effects

Symptoms	Contact may cause irritation and redness.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Flammable due to alcohol content.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Use personal protective equipment as required. Spills may be slippery.

Environmental precautions

Environmental precautions Collect spillage. See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up Pick up with mop, wet/dry vac, or absorbent material. Rinse area with clear water and allow floor to dry before allowing traffic.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing and eye/face protection. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharges. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Keep container tightly closed. Use explosion proof equipment.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from heat, sparks, flame. Keep container closed when not in use. Store at room temperature. Keep from freezing.

Incompatible Materials Chlorine bleach.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethyl Alcohol 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m ³ (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m ³	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m ³

Appropriate engineering controls

Engineering Controls Apply technical measures to comply with the occupational exposure limits.

Individual protection measures, such as personal protective equipment

Eye/Face Protection When using product, do not rub eyes.

Skin and Body Protection No special technical protective measures are necessary.

Respiratory Protection No protective equipment is needed under normal use conditions.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

Physical state	Liquid	Odor	Fruity Floral
Appearance	Clear liquid	Odor Threshold	Not determined
Color	Not determined		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not available	
Melting Point/Freezing Point	Not determined	
Boiling Point/Boiling Range	78 °C / 172 °F	
Flash Point	23 °C / 74 °F	
Evaporation Rate	> 1.0	CC (closed cup) (Water = 1)
Flammability (Solid, Gas)	n/a-liquid	
Flammability Limits in Air		
Upper Flammability Limits	Not available	
Lower Flammability Limit	Not available	
Vapor Pressure	Not determined	
Vapor Density	Not determined	
Relative Density	0.88	
Water Solubility	Infinite	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Auto-ignition Temperature	Not determined	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	

10. STABILITY AND REACTIVITY**Reactivity**

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid

Heat, flames and sparks.

Incompatible Materials

Chlorine bleach.

Hazardous Decomposition Products

None under normal use conditions.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure**

Product Information	Product does not present an acute toxicity hazard based on known or supplied information
Eye Contact	Causes serious eye irritation.
Skin Contact	Not expected to be a skin irritant during prescribed use.
Inhalation	Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
Ingestion	Do not ingest.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Ethyl Alcohol 64-17-5	= 7060 mg/kg (Rat)	-	= 124.7 mg/L (Rat) 4 h
Water 7732-18-5	> 90 mL/kg (Rat)	-	-
Polydimethylsiloxane 63148-62-9	> 24 g/kg (Rat) > 17 g/kg (Rat)	> 2 g/kg (Rabbit)	-

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity Ethanol has been shown to be carcinogenic in long-term studies only when consumed as an alcoholic beverage.

Chemical Name	ACGIH	IARC	NTP	OSHA
Ethyl Alcohol 64-17-5	A3	Group 1	Known	X

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects.

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Ethyl Alcohol 64-17-5		13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through 100: 96 h Pimephales promelas mg/L LC50 static 12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static	10800: 24 h Daphnia magna mg/L EC50 9268 - 14221: 48 h Daphnia magna mg/L LC50 2: 48 h Daphnia magna mg/L EC50 Static

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient
Ethyl Alcohol 64-17-5	-0.32

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated Packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations.

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Ethyl Alcohol 64-17-5	Toxic Ignitable

14. TRANSPORT INFORMATION

Note

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

UN/ID No	UN1170
Proper Shipping Name	Ethanol solution
Hazard Class	3
Packing Group	III

IATA

UN/ID No	UN1170
Proper Shipping Name	Ethanol solution
Hazard Class	3
Packing Group	III

IMDG

UN/ID No	UN1170
Proper Shipping Name	Ethanol solution
Hazard Class	3
Packing Group	III

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL/NDSL	EINECS/E LINCS	ENCS	IECSC	KECL	PICCS	AICS
Ethyl Alcohol	X	X	X	Present	X	Present	X	X
Water	X	X	X	X	X	Present	X	X
Polydimethylsiloxane	X	X			X	Present	X	X

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations**SARA 313**

Not determined

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Ethyl Alcohol - 64-17-5	Carcinogen Developmental

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Ethyl Alcohol 64-17-5	X	X	X

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards	Flammability	Instability	Special Hazards
	0	3	0	Not determined
<u>HMIS</u>	Health Hazards	Flammability	Physical hazards	Personal Protection
	Not determined	Not determined	Not determined	Not determined

Issue Date: 27-Dec-2011
Revision Date: 22-Dic-2017
Revision Note: Telephone number update

Disclaimer

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.

End of Safety Data Sheet

Section 1: Product and Company Identification

Product Name	Vital Oxide RTU	Aqueous Oxidant												
SDS No.	VO010118	<table border="1"><tr><td>H</td><td>0</td><td></td></tr><tr><td>F</td><td>0</td><td></td></tr><tr><td>R</td><td>0</td><td></td></tr><tr><td>PE</td><td>--</td><td></td></tr></table>	H	0		F	0		R	0		PE	--	
H	0													
F	0													
R	0													
PE	--													
Manufacturer/Distributor	Vital Solutions, LLC PO Box 2299 West Palm Beach, FL 33404													
Phone Numbers														
Medical Emergency	(800) 222-1222													

Section 2: Hazards Identification

2.1 GHS Classification: This material is not considered hazardous by the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200)

Remarks For full text of Hazard- and EU Hazard-statements: see SECTION 16.

Emergency Overview: Colorless liquid with mild fresh odor. Avoid contact with eyes. Keep out of reach of children.

HMIS Rating: PPE: 0	Health: 0	Flammability: 0	Reactivity: 0
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GHS Classification: This material is not considered hazardous by the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200)

Potential Health Effects

2.2 Potential Health Effects

Eye Contact: Eye contact may cause mild eye irritation with discomfort.

Skin Contact: Does NOT cause skin irritation and the product is NOT skin sensitizer.

Inhalation: Does NOT cause any respiratory irritation. If consumer product accidentally contacts strong acids in restricted ventilation area, avoid breathing the vapors and allow adequate time for the vapors to disperse before re-entering the restricted area.

Ingestion: Non-Toxic **Carcinogenicity Information:** IARC, NTP, OSHA, and ACGIH list none of the components present in this material at concentrations equal to or greater than 0.1% as carcinogens.

Hazard statements: Eye contact may cause mild eye irritation with discomfort.

Precautionary statements

Precautionary statements – prevention: P234 Keep only in original container, or properly labeled second container

Precautionary statements – response

P390 Absorb spillage to prevent waste

2.3 Labeling elements:



Section 3: Composition / Information on Ingredients

Ingredients	CAS Number	Wt %
Oxychlorine Compounds	Mixture	0.200
n-Alkyl Dimethyl Benzyl Ammonium Chloride	68391-01-5	0.125
n-Alkyl Dimethyl Ethylbenzyl Ammonium Chloride	85409-23-0	0.125
Inert Ingredients	Mixture	99.55

At these concentrations none of the ingredients are known to pose any hazards to human health.

Section 4: First Aid Measures

Inhalation

Does NOT cause any respiratory irritation. If consumer product accidentally contacts strong acids in restricted ventilation area, avoid breathing the vapors, and allow adequate time for the vapors to disperse before re-entering the restricted area.

Skin Contact

Does NOT cause skin irritation.

Eye Contact

In case of contact, flush eyes with plenty of water.

Ingestion

Non-toxic. Give a glass of water.

Section 5: Fire Fighting Measures

Flammable Properties: Flash Point: Not Available (Non Flammable)

Flammable Limits: Lower Flammable Limit: Not Established

Burn Rate: Unknown

Upper Flammable Limit: Not Established

Flammability Classification: Non-Flammable liquid **Auto ignition Temperature:** Not Established

Hazardous Combustion Products: Thermal or other decomposition may yield chlorine dioxide or chlorine.

Extinguishing Media: N/A (Non-Flammable liquid) **Additional Considerations:** None

FIRE FIGHTING INSTRUCTIONS: Non-Flammable liquid

NFPA Rating: Health: 0 Flammability: 0 Reactivity: 0 PPE: None

Section 6: Accidental Release Measures

Spill Clean Up

No special cleanup measures are required for the consumer product. To avoid the possibility of "bleaching" the spill should be absorbed with paper towels, and the area rinsed with clean water.

Accidental Release Measures

Spills are slippery and should be cleaned up promptly.

Section 7: Handling and Storage

Handling: Keep away from heat and strong acids. Do not ingest. Keep container closed. Use only with adequate ventilation.

Storage: Keep container tightly closed and sealed until ready for use. Keep container in a well-ventilated place. Do not store above 120°F or near fire or open flame. Store large quantities in buildings to comply with OSHA 1910.106. Do not transfer contents to bottles or other unlabeled containers. Do not reuse empty containers. Keep out of reach of children.

Incompatible materials: Strong acids

Special Packaging Materials: None

Section 8: Exposure Control/ Personal Protection

Engineering Controls: Use in adequately ventilated areas.

Personal Protective Equipment:

Eye/Face Protection: Not required for consumer product.

Skin Protection: Not required for consumer product.

Respirators: None required for normal use. If consumer product accidentally contacts strong acids in restricted ventilation area, Avoid breathing the vapors, and allow adequate time for the vapors to disperse before re-entering the restricted area.

Exposure Limits:

Oxychlorine Compounds:

n-Alkyl Dimethyl Ethylbenzyl Ammonium Chloride:

PEL (OSHA): Not available PEL (OSHA): Not available

TLV (ACGIH): Not available TLV (ACGIH): Not available

n-Alkyl Dimethyl Benzyl Ammonium Chloride:

PEL (OSHA): Not available

TLV (ACGIH): Not available

Section 9: Physical and Chemical Properties

Appearance:	Colorless liquid	Odor:	Mild-Fresh
Physical State:	Liquid	pH:	8 - 9
Boiling Point (°F):	212	Solubility in Water:	100%
Freezing Point (°F):	32	Vapor Pressure (mm Hg):	Not Available
Volatile Organic Compounds (VOC):	None	Evaporation Rate:	Less than Ether
Specific Gravity:	1.003 @ 68°F (20°C)	Density (lb/gal):	8.40 @ 68°F (20°C)

Section 10: Stability and Reactivity

Chemical Stability: The product is stable.

Incompatibility with other Materials: Strong acids

Conditions to avoid: Contact with strong acids

Hazardous Polymerization: Will not occur.

Hazardous Decomposition Products: Thermal or other decomposition may yield chlorine dioxide or chlorine.

Section 11: Toxicological Information

TOXICITY TESTING – ACUTE Inhalation – Studies with Wistar Albino rats exposed to a respirable aerosol made from a solution of Fresh15 at a level of 2.08 mg/l for four hours resulted in no deaths and no abnormal necropsy observations. **Eye Contact** – Studies with New Zealand white rabbits showed this product is a very mild ocular irritant; mild conjunctival irritation was observed, but cleared within 24 hours. **Skin Contact** – Study of dermal toxicity in New Zealand white rabbits showed the product to be non-toxic: Dermal LD₅₀ > 5,000 mg/kg of body weight; Study of dermal irritation in New Zealand white rabbits showed the product is not a dermal irritant. In Dermal Sensitization studies, Fresh15 was determined not to be a sensitizer. **Swallowing** - Acute oral toxicity in albino rats: Non-toxic LD₅₀ > 5,000 mg/kg of body weight.

EPA TOXICITY RATING – IV This is the lowest category on the scale and is designed for substances that are the least hazardous.

Section 12: Ecological Information

Environmental Hazards: Not data available.

Environmental Fate: Not data available.

Section 13: Disposal Considerations

Waste Disposal: Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial and Local regulations.

Section 14: Transport Information

Shipping Information: Not regulated by DOT, IMO/IMDG and IATA/ICAO for ground, air or ocean shipments.

Section 15: Regulatory Information

U.S. Federal Regulations:

TSCA: All components appear in TSCA Inventory

OSHA: Refer to Section 8 for exposure limits.

CERCLA SARA Hazard Category:

Section 311 and 312: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories: None

Section 313: This product contains following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372: None

State regulations: State Right to Know information is not provided. **California prop. 65 (no significant risk level):** None

International Regulations:

Canadian WHMIS: Not controlled

Canadian Environmental Protection Act (CEPA): Additional information available upon request.

EU Regulations: Additional information available upon request.

Section 16: Other Information

HMIS Rating:**Health: 0****Flammability: 0****Reactivity: 0****PPE: None**

The information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Vital Solutions, LLC. The Data on this sheet related only to the specific material designed herein. Vital Solutions, LLC, assumes no legal responsibility for the use or reliance on this data.

End of SDS



Safety Data Sheet

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Document Group:	18-1456-5	Version Number:	9.00
Issue Date:	09/03/14	Supersedes Date:	09/08/11

SECTION 1: Identification

1.1. Product identifier

3M™ HB Quat Disinfectant Cleaner Concentrate (Product No. 25, 3M™ Chemical Management Systems)

Product Identification Numbers

ID Number	UPC	ID Number	UPC
61-0000-6350-5		61-0000-6351-3	
61-0000-6386-9		61-0000-6387-7	
70-0715-9166-6	00-48011-59741-1	70-0715-9183-1	00-48011-23550-4
70-0715-9184-9	00-48011-23582-5	70-0715-9187-2	00-48011-23551-1
70-0715-9189-8	00-48011-23581-8	70-0716-5819-2	

1.2. Recommended use and restrictions on use

Recommended use

Disinfectant

1.3. Supplier's details

MANUFACTURER: 3M
DIVISION: Commercial Solutions Division
ADDRESS: 3M Center, St. Paul, MN 55144-1000, USA
Telephone: 1-888-3M HELPS (1-888-364-3577)

1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

SECTION 2: Hazard identification

The label elements below were prepared in accordance with OSHA Hazard Communication Standard, 29 CFR 1910.1200. This information may be different from the actual product label information for labels regulated by other agencies.

2.1. Hazard classification

Corrosive to metal: Category 1.
 Flammable Liquid: Category 3.
 Serious Eye Damage/Irritation: Category 1.
 Skin Corrosion/Irritation: Category 1.

2.2. Label elements

Signal word

Danger

Symbols

Flame | Corrosion |

Pictograms



Hazard Statements

May be corrosive to metals.
Flammable liquid and vapor.

Causes serious eye damage.
Causes severe skin burns and eye damage.

Precautionary Statements

Prevention:

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Keep container tightly closed.
Keep only in original container.
Do not breathe dust/fume/gas/mist/vapors/spray.
Wear protective gloves, protective clothing, and eye/face protection.
Wash thoroughly after handling.

Response:

IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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 or doctor/physician.
Wash contaminated clothing before reuse.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.
Absorb spillage to prevent material damage.

Storage:

Store in a corrosive resistant container with a resistant inner liner.
Store in a well-ventilated place. Keep cool.
Store locked up.

Disposal:

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

2.3. Hazards not otherwise classified

May cause chemical gastrointestinal burns.
13% of the mixture consists of ingredients of unknown acute oral toxicity.
19% of the mixture consists of ingredients of unknown acute dermal toxicity.
39% of the mixture consists of ingredients of unknown acute inhalation toxicity.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
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WATER	7732-18-5	40 - 70 Trade Secret *
ALKYL (68% C12, 32% C14) DIMETHYL ETHYLBENZYL AMMONIUM CHLORIDE	68391-01-5	13.238
ALKYL (60% C14, 30% C16, 5% C12, 5% C18) DIMETHYL BENZYL AMMONIUM CHLORIDE	68956-79-6	13.238
ETHOXYLATED C12-C15 ALCOHOLS	68131-39-5	5 - 10 Trade Secret *
TETRASODIUM ETHYLENEDIAMINETETRAACETATE	64-02-8	3 - 7 Trade Secret *
ETHYL ALCOHOL	64-17-5	1 - 5 Trade Secret *

*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

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

See Section 11.1. Information on toxicological effects.

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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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. Refer to other sections of this SDS for information regarding

physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

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 designed for use on solvents, such as alcohols and acetone, that can dissolve in water. An AR - AFFF type foam is recommended. 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. Absorb spillage to prevent material damage. 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.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

For industrial or professional use only. 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. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not breathe fume/vapors. 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. 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.

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

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
ETHYL ALCOHOL	64-17-5	ACGIH	STEL:1000 ppm	A3: Confirmed animal carcin.
ETHYL ALCOHOL	64-17-5	OSHA	TWA:1900 mg/m3(1000 ppm)	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

NOTE: When used with a chemical dispensing system 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 fume/vapors. 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 chemical dispensing system as directed, eye contact with the concentrate is not expected to occur. 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 chemical dispensing system 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:

Butyl Rubber

Nitrile Rubber

Polymer laminate

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. If product is not used with a chemical dispensing system or if there is an accidental release: Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended:

Apron – Butyl rubber

Apron – Nitrile

Apron - polymer laminate

Respiratory protection

NOTE: When used with a chemical dispensing system 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

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

General Physical Form:	Liquid
Specific Physical Form:	Liquid
Odor, Color, Grade:	Clear to slightly golden yellow liquid with neutral fragrance.
Odor threshold	<i>No Data Available</i>
pH	12.1 - 13.3
Boiling Point	> 133 °F
Flash Point	Approximately 133 °F [<i>Test Method:</i> Tagliabue Closed Cup]
Evaporation rate	<i>No Data Available</i>
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	<i>No Data Available</i>
Flammable Limits(UEL)	<i>No Data Available</i>

Vapor Pressure	No Data Available
Vapor Density	No Data Available
Density	No Data Available
Specific Gravity	1.009 - 1.023 [Ref Std: WATER=1]
Solubility in Water	Complete
Solubility- non-water	No Data Available
Decomposition temperature	No Data Available
Viscosity	22.9 - 27.9 sec [Details: (Zahn #2)]
Volatile Organic Compounds	3 - 7 % weight
Percent volatile	40 - 75 %
VOC Less H2O & Exempt Solvents	70 - 120 g/l

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

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	Not Specified
Carbon dioxide	Not Specified
Oxides of Nitrogen	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.

Skin Contact:

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:

May be 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.

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 > 5,000 mg/kg
Overall product	Inhalation-Vapor(4 hr)		No data available; calculated ATE > 50 mg/l
Overall product	Ingestion		No data available; calculated ATE 2,000 - 5,000 mg/kg
ALKYL (68% C12, 32% C14) DIMETHYL ETHYLBENZYL AMMONIUM CHLORIDE	Dermal	Not available	LD50 > 2,000 mg/kg
ALKYL (68% C12, 32% C14) DIMETHYL ETHYLBENZYL AMMONIUM CHLORIDE	Ingestion	Not available	LD50 500 mg/kg
ETHOXYLATED C12-C15 ALCOHOLS	Dermal	Rat	LD50 5,000 mg/kg
ETHOXYLATED C12-C15 ALCOHOLS	Ingestion	Rat	LD50 1,200 mg/kg
ETHYL ALCOHOL	Dermal	Rabbit	LD50 > 15,800 mg/kg
ETHYL ALCOHOL	Inhalation-Vapor (4 hours)	Rat	LC50 124.7 mg/l
ETHYL ALCOHOL	Ingestion	Rat	LD50 17,800 mg/kg
TETRASODIUM ETHYLENEDIAMINETETRAACETATE	Ingestion	Rat	LD50 1,658 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
ALKYL (68% C12, 32% C14) DIMETHYL ETHYLBENZYL AMMONIUM CHLORIDE		Corrosive
ETHYL ALCOHOL	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
ALKYL (68% C12, 32% C14) DIMETHYL ETHYLBENZYL AMMONIUM CHLORIDE		Corrosive
ETHOXYLATED C12-C15 ALCOHOLS	Not available	Corrosive
ETHYL ALCOHOL	Rabbit	Moderate irritant

Skin Sensitization

Name	Species	Value
ETHYL ALCOHOL	Human	Some positive data exist, but the data are not sufficient for classification

Respiratory Sensitization

Name	Species	Value
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Germ Cell Mutagenicity

Name	Route	Value
ETHYL ALCOHOL	In Vitro	Some positive data exist, but the data are not sufficient for classification
ETHYL ALCOHOL	In vivo	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
ETHYL ALCOHOL	Ingestion	Multiple animal species	Some positive data exist, but the data are not sufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
ETHYL ALCOHOL	Inhalation	Not toxic to development	Rat	NOAEL 38 mg/l	during gestation
ETHYL ALCOHOL	Ingestion	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 5,200 mg/kg/day	prematuring & during gestation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
ALKYL (68% C12, 32% C14) DIMETHYL ETHYLBENZYL AMMONIUM CHLORIDE	Inhalation	respiratory irritation	May cause respiratory irritation		NOAEL Not available	
ETHYL ALCOHOL	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	LOAEL 2.6 mg/l	30 minutes
ETHYL ALCOHOL	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	LOAEL 9.4 mg/l	not available
ETHYL ALCOHOL	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL not available	
ETHYL ALCOHOL	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL 3,000 mg/kg	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
ETHYL ALCOHOL	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rabbit	LOAEL 124 mg/l	365 days
ETHYL ALCOHOL	Inhalation	hematopoietic system immune system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 25 mg/l	14 days
ETHYL ALCOHOL	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 8,000 mg/kg/day	4 months
ETHYL ALCOHOL	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL 3,000 mg/kg/day	7 days

Aspiration Hazard

Name	Value

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

Ecotoxicological information

A 3M Product Environmental Data Sheet (PED) is available.

Chemical fate information

A 3M Product Environmental Data Sheet (PED) is 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. 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.

EPA Hazardous Waste Number (RCRA): D001 (Ignitable), D002 (Corrosive)

SECTION 14: Transport Information

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

SECTION 15: Regulatory information

15.1. US Federal Regulations

311/312 Hazard Categories:

Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - Yes

FIFRA

Status

Registered

Registration Number

61178-5-10350

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. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER

KEEP OUT OF REACH OF CHILDREN:

Corrosive. Causes irreversible eye damage and skin burns.

Do not get in eyes, on skin, or on clothing. Harmful if swallowed. Wear protective eyewear (goggles, face shield or safety glasses). Wear protective clothing and rubber gloves. Avoid contamination of food. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash clothing before reuse.

STATEMENT OF PRACTICAL TREATMENT:

FIRST AID

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 - 20 minutes. Call a poison control center or doctor for treatment advice.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice. Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For additional medical advice, call the following emergency phone number: (651) 737-6501 OR 1-800-364-3577.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

PHYSICAL OR CHEMICAL HAZARDS

Combustible. Do not use or store near heat or open flame.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

STORAGE Do not store on side. Avoid creasing or impacting of side walls. Store securely in closed original container. Avoid storage at temperature extremes or in sunlight. Avoid shipping or storing below freezing. If product freezes, thaw at room temperature and shake gently to remix components. Use locked storage in an area that will prevent cross-contamination of other pesticides, fertilizer, food and feed. Store in locked area inaccessible to children.

PESTICIDE DISPOSAL Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Discard rinsate. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available.

15.2. State Regulations

15.3. Chemical Inventories

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 product are in compliance with the new substance notification requirements of CEPA.

The components of this material are in compliance with the China "Measures on Environmental Management of New Chemical Substance". Certain restrictions may apply. Contact the selling division for additional information.

The components of this material are in compliance with the provisions of the Korean Toxic Chemical 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 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 chemical notification requirements of TSCA.

15.4. International Regulations

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: Other information

NFPA Hazard Classification

Health: 3 Flammability: 2 Instability: 0 Special Hazards: None

Acid/Base: Alkaline Corrosive: Yes

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

HMIS Hazard Classification

Health: 3 Flammability: 2 Physical Hazard: 0 Personal Protection: X - See PPE section.

Hazardous Material Identification System (HMIS® III) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® III ratings are to be used with a fully implemented HMIS® III program. HMIS® is a registered mark of the American Coatings Association (ACA).

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