
SAFETY DATA SHEET

1. IDENTIFICATION

PRODUCT NAME: CONSULT FECAL OCCULT BLOOD TESTING KIT
MFR #: 300

DISTRIBUTED BY: McKesson Medical-Surgical Inc.
9954 Mayland Drive, Suite 4000
Richmond, Virginia 23233

INFORMATION LINE: 1-800-777-4908
Monday – Friday 8:00 a.m. – 6:00 p.m. EST

EMERGENCY PHONE: 1-800-451-8346 (3E Company) Day or Night

Other means of identification:

Component Name	Component Number
Consult Diagnostics Single Slides	551620
Consult Diagnostics Developer	551622

2. HAZARDS IDENTIFICATION

Classification of the chemical:

Component Name	GHS Classification	Hazard Statement
Consult Diagnostics Developer	Flammable (Category 2)	Flammable

Label elements:

Signal word: Danger! Flammable

Precautionary statements:

Skin: Cause skin irritation

Eye: Cause eyedamage

Inhalation: May be harmful if inhaled, may cause drowsiness or dizziness

Ingestion: May be fatal or cause blindness ifswallowed

Wear protective gloves/eye and face protection/protective clothing

3. COMPOSITION/INFORMATION ONINGREDIENTS

Component Name	Chemical Name	CAS #	Concentration
Consult Diagnostics Developer	Denatured Ethanol Hydrogen Peroxide	NA 7722-84-1	70% <6%

NOTE: All other components present no significant physical or chemical hazard

4. FIRST AID MEASURES

Description of first aid measures:

Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Skin contact: Wash off with soap and plenty ofwater.

Eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Ingestion: Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIREFIGHTING MEASURES

Conditions of flammability: Keep away from heat/spark/open flame/hot surface. No smoking.

Extinguishing media: Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture: Carbon Oxides

Special protective equipment and precautions for firefighters: Wear self contained breathing apparatus for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures: Use personal protective equipment. Ensure adequate ventilation. Remove all source of ignition. Evacuate personnel to safe areas. Do not let product enter drains.

Methods and materials for containment and cleaning up: Contain spillage, collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling: Use personal protective equipment. Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Keep away from sources of ignition – No smoking.

Conditions for safe storage, including any incompatibilities: Keep containers tightly closed. Containers which are opened must be resealed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits (AGGIH TLV & OSHA PEL):

Chemical Name	AGGIH TLV	OSHA PEL
Denatured Alcohol:		
Ethyl Alcohol	1000 ppm	1000 ppm
Methyl Alcohol	200 ppm	200 ppm
Hydrogen Peroxide	1 ppm	1 ppm

Exposure controls:

Respiratory protection: Use NOISH approved respirators.

Skin protection: Wear appropriate protective gloves and suitable protective clothing.

Eye protection: Wear appropriate eye protection (safety glasses, goggles or face shield).

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear colorless liquid

Odor: Mild, alcohol-like

Odor threshold: No data available

pH: No data available

Melting point/Freezing point: No data available

Initial boiling point and range: No data available

Flash point: No data available

Evaporation rate: No data available

Flammability (solid, gas): No data available

Upper/lower flammability or explosive limits: No data available

Vapor pressure: No data available

Relative density: No data available

Solubility in water: Completely soluble

Partition coefficient: n-octanol/water: No data available

Auto-ignition temperature: No data available

Decomposition temperature: No data available

Viscosity: No data available

10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical stability: Stable under recommended storage conditions.

Possibility of hazard reaction: Vapors may form explosive mixture in the air.

Conditions to avoid: Heat, flames and sparks. Extremes of temperature and direct sunlight.

Incompatible materials: Oxidizing agents.

Hazard decomposition products: In the event of fire: Carbon oxides

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Toxicological data:

LD 50: No data available

Carcinogenicity: No components of this product are listed as carcinogen by IARC, NTP or OSHA.

Potential health effects:

Skin: May be harmful if absorbed through skin. Cause skin irritation.

Eye: Cause eye irritation.

Inhalation: May be harmful if inhaled. Vapors may cause drowsiness and dizziness.

Ingestion: May be harmful if swallowed.

Other important toxicological hazards: To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

Eco-toxicity: No data available

Persistence and degradability: No data available

Bio-accumulative potential: No data available

Mobility in soil: No data available

Other adverse effects: No data available

13. DISPOSAL CONSIDERATION

Observe all federal, state and local regulations.

14. TRANSPORT INFORMATION

DOT (US): NOTE: This product conforms to DOT Small Quantity Exception 49CFR173.4.

UN number:

UN proper shipping name:

Transport hazard class:

Packing group:

15. REGULATORY INFORMATION

US State Right to Know Laws:

California Proposition 65: This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

Other US State "Right to Know" List: The following chemicals are listed by individual States:

Ethyl Alcohol (MA, PA, NJ)

Methyl Alcohol (MA, PA, NJ)

Hydrogen Peroxide (MA, PA, NJ)

16. OTHER INFORMATION

SDS Creation date: 7/23/2014

Revision #: 3

Disclaimer

This information relates onto to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. The information and recommendations contained herein are to the best of the manufacturer's knowledge and belief accurate and reliable as of the date indicated. No representation warranty or guarantee, however, is made with regards to accuracy, reliability or completeness. Conditions of use of the material are under the control of the user; therefore, it is the user's responsibility to satisfy itself as to the suitability and completeness of such information for its own particular use. Appropriate warnings and safe-handling procedures should be provided to handlers and users.



CaviCide™
Date Prepared: 3/23/16

SAFETY DATA SHEET

Section 1. Product And Company Identification

Product Name: CaviCide™

Product Use: Hard surface cleaner and disinfectant

Manufacturer: METREX™ RESEARCH
28210 Wick Rd
Romulus, MI 48174
U.S.A.

Information Phone Number: 1-800-841-1428 (Customer Service)

Chemical Emergency Phone Number (Chemical Spills, Leaks, Fire, Exposure or Accident only):
CHEMTREC 1-800-424-9300 (in the US) 1-703-527-3887 (Outside the US)

SDS Date Of Preparation/Revision: 3/23/16

Section 2. Hazards Identification

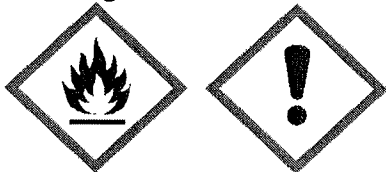
GHS / HAZCOM 2012 Classification:

Flammable Liquid Category 3

Eye Irritation Category 2A

Specific Target Organ Toxicity Single Exposure Category 3 (Narcotic effects)

Warning!



Hazard Phrases

Flammable liquid and vapor.

Causes serious eye irritation.

May cause drowsiness or dizziness.

Prevention:

Keep away from heat, sparks, open flames, hot surfaces – No smoking.

Keep container tightly closed.

Use explosion-proof electrical, ventilating and light equipment.

Take precautionary measures against static discharge.

Avoid breathing vapors.

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Wear eye protection.

Response:



IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.

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 attention.

In case of fire: Use water spray or fog, alcohol-resistant foam, carbon dioxide or dry chemical to extinguish.

Storage

Store in a well ventilated place. Keep cool.

Disposal

Dispose of contents and container in accordance with local and national regulations.

Other hazards: None

Section 3. Composition/Information On Ingredients
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Component	CAS No.	Amount
Water	7732-18-5	70-80%
Isopropanol	67-63-0	17.2%
Ethylene Glycol Monobutyl Ether (2-Butoxyethanol)	111-76-2	1-5%
Diisobutylphenoxyethoxyethyl dimethylbenzyl ammonium chloride	121-54-0	0.28%

Section 4. First Aid Measures

Inhalation: Move to fresh air if effects occur and seek medical attention if effects persist.

Skin Contact: Remove contaminated clothing. Wash all affected and exposed areas with soap and water. If skin irritation or redness develops and persists, seek medical attention.

Eye Contact: 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. Call a poison control center or doctor for treatment advice.

Ingestion: If swallowed, get medical advice by calling a Poison Control Center or hospital emergency room. If advice is not available, take victim and product container to the nearest emergency treatment center or hospital. Do not attempt to give anything by mouth to an unconscious person.

Most Important symptoms and effects, both acute and delayed: Causes serious eye irritation. Inhalation of concentrated vapors may cause irritation of the eyes, nose and throat and dizziness and drowsiness.

Indication of any immediate medical attention and special treatment needed: Immediate medical attention is not generally required.



Section 5. Fire Fighting Measures

Suitable (and Unsuitable) Extinguishing Media: Use water spray or fog, alcohol-resistant foam, carbon dioxide or dry chemical. Cool fire exposed containers with water.

Specific Hazards Arising from the Chemical: Flammable liquid and vapor. May form explosive mixtures in air at temperatures at or above the flashpoint. Flammable vapors may collect in confined areas. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flashback. Fire exposed containers may rupture explosively.

Special Protective Equipment and Precautions for Fire-fighters: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored.

Section 6: Accidental Release Measures

Personal precautions, Protective equipment, and Emergency procedures: Wear appropriate protective clothing and equipment.

Environmental Precautions: Avoid release to the environment.

Methods and Materials for Containment and Cleaning up: Eliminate all ignition sources. Ventilate area. Use explosion-proof equipment if large amounts are released. Stop leak if it is safe to do so and move containers from the spill area. Collect material with an inert absorbent material and place in appropriate, labeled container for disposal.

Section 7. Handling and Storage

Precautions for Safe Handling: Do not get in eyes or on clothing. Wear appropriate eye protection when handling. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

Flammable liquid and vapor. Keep away from heat, sparks, open flames and all other sources of ignition.

Do not smoke in storage or use areas. Keep containers closed when not in use. Do not reuse empty containers.

Conditions for Safe Storage, Including any Incompatibilities: Store in a cool, well ventilated area away from heat, oxidizers and all sources of ignition. Do not contaminate water, food or feed by storage.

Empty containers retain product residues and may be hazardous. Do not flame cut, drill, weld, etc. on or near empty containers, even empty.



Section 8. Exposure Controls / Personal Protection

Exposure Limits

Chemical	Exposure Limit
Water	None Established
Isopropanol	200 ppm TWA, 400 ppm STEL ACGIH TLV 400 ppm TWA OSHA PEL
Ethylene Glycol Monobutyl Ether (2-Butoxyethanol)	20 ppm TWA ACGIH TLV 50 ppm TWA OSHA PEL (skin)
Diisobutylphenoxyethoxyethyl dimethyl benzylammonium chloride	None Established

Appropriate Engineering Controls: General ventilation should be adequate for normal use. For operations where the exposure limits may be exceeded, mechanical ventilation such as local exhaust may be needed to minimize exposure. Use explosion proof electrical equipment and wiring where required.

Respiratory Protection: None under normal use conditions with adequate ventilation. For operations where the occupational exposure limits are exceeded, an approved respirator with an organic vapor cartridge or supplied air respirator is recommended. Equipment selection depends on contaminant type and concentration. Select in accordance with applicable regulations and good industrial hygiene practice. For firefighting, use self-contained breathing apparatus.

Hand protection: Impervious gloves such as butyl rubber or nitrile are recommended for operations which may result in prolonged or repeated skin contact.

Eye Protection: Splash proof goggles, face shield, or safety glasses are recommended to prevent eye contact.

Skin Protection: Wear protective clothing if needed to avoid prolonged/ repeated skin contact. Contaminated clothing should be removed and laundered before re-use.

Hygiene measures: Suitable eye wash and washing facilities should be available in the work area.

Section 9. Physical and Chemical Properties

Appearance:	Clear liquid.	Odor:	Alcohol
Odor Threshold:	0.001 ppm (ethylene glycol monobutyl ether)	pH:	11.0-12.49
Melting/Freezing Point:	Not determined	Boiling Point/Range:	Not determined
Flash Point:	28.3°C (83°F)	Evaporation Rate:	Not determined
Flammability: (Solid, Gas)	Not applicable	Flammability Limits:	LEL: 2% UEL: 12.7%
Vapor Pressure:	43.3 mmHg @ 20°C (isopropanol)	Vapor Density:	2.1 (isopropanol)
Relative Density:	0.972	Solubilities:	Completely soluble in water



Partition Coefficient: Not determined
(N-Octanol/Water)
Decomposition Not determined
Temperature:

Autoignition Not determined
Temperature:
Viscosity: Not determined

Section 10. Stability and Reactivity

Reactivity: Not reactive at ambient temperatures.

Chemical Stability: Stable.

Possibility of Hazardous Reactions: Not reactive.

Conditions to avoid: Heat, sparks, flames and all other sources of ignition.

Incompatible Materials: Strong oxidizing agents, acids and strong reducing agents.

Hazardous decomposition products: Thermal decomposition will produce carbon monoxide, carbon dioxide, nitrogen oxides, amines, chlorine and hydrogen chloride.

Section 11. Toxicological Information

Potential Health Effects:

Inhalation: May cause irritation of the nose, throat and upper respiratory tract. High vapor concentrations may produce nausea, vomiting, headache, dizziness, drowsiness, weakness, fatigue, narcosis and possible unconsciousness. Not acutely toxic in rats.

Skin Contact: Prolonged or repeated exposure may cause mild irritation. No signs of toxicity or irritation were observed in a dermal toxicity study in rabbits. Non-irritating in a primary irritation study with rabbits. Negative in a skin sensitization study with guinea pigs.

Eye Contact: May cause irritation with tearing, redness and pain. Moderate irritant in an eye irritation study with rabbits. Effects reversed in 7 days.

Ingestion: Ingestion may cause gastrointestinal disturbances and central nervous system effects such as headache, dizziness, drowsiness and nausea. Not acutely toxic in rats.

Chronic Hazards: Prolonged overexposure to ethylene glycol monobutyl ether may affect liver, kidneys, blood, lymphatic system or central nervous system.

Medical Conditions Aggravated By Exposure: None currently known.

Carcinogen: None of the components is listed as a carcinogen or potential carcinogen by IARC, NTP, ACGIH, or OSHA.

Acute Toxicity Values for CaviCide:

LD50 Oral Rat >5000 mg/kg, LD50 Dermal Rat >2000 mg/kg, LC50 inhalation LC50 rat >2.08 mg/L

Section 12. Ecological Information



This product is not classified as aquatically toxic based on the GHS criteria for aquatic toxicity.

Toxicity: No toxicity data available for product.

Isopropanol: LC50 fathead minnows 11,130 mg/L/48 hr; LC50 brown shrimp 1400 mg/L/48 hr
Diisobutylphenoxyethoxyethyl dimethylbenzylammonium chloride: LC50 pimephales promelas 1.6 mg/L/96 hr, LC50 lepomis macrochirus 1.4 mg/L/96 hr.

Persistence and degradability: Isopropanol and 2-butoxyethanol are readily biodegradable in screening tests. Diisobutylphenoxyethoxyethyl dimethylbenzylammonium chloride is not readily biodegradable.

Bioaccumulative Potential: Isopropanol has an estimated BCF of 3 suggesting that the potential for bioaccumulation is low.

Mobility in Soil: Isopropanol is expected to have very high mobility in soil.

Other Adverse Effects: None known

Section 13. Disposal Considerations

Solution Disposal: Discharge residual and unused solutions in accordance with Federal, State, and local regulations. For used solution, the waste solution must be characterized by the generator and disposed of in accordance with Federal, State, and local regulations.

Container Disposal: Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. If recycling is not available, discard in accordance with hospital policy.

Section 14. Transport Information

	UN Number	UN Proper Shipping Name	Hazard Class(s)	Packing Group	Environmental Hazards
US DOT	None	Not Regulated per alcohol exception (49CFR 173.150(e))	None	None	None
EU ADR/RID	UN1987	Alcohols, n.o.s. (Isopropanol)	3	III	None
IMDG	UN1987	Alcohols, n.o.s. (Isopropanol)	3	III	None
IATA/ICAO	UN1987	Alcohols, n.o.s. (Isopropanol)	3	III	None

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable – product is transported only in packaged form.

Special precautions: None identified

Section 15. Regulatory Information



U.S. Federal Regulations:

EPA SARA 311/312 Hazard Classification: Fire Hazard, Acute Health, Chronic Health

EPA SARA 313: This Product Contains the Following Chemicals Subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372):

Ethylene Glycol Monobutyl Ether (Glycol Ether)	111-76-2	1-5%
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Protection Of Stratospheric Ozone: This product is not known to contain or to have been manufactured with ozone depleting substances as defined in 40 CFR Part 82, Appendix A to Subpart A.

CERCLA SECTION 103: This product is not subject to CERCLA reporting requirements; however, many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

US EPA Registered Pesticide: 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.

CAUTION!

Harmful if absorbed through the skin.
Causes moderate eye irritation.
Keep out of reach of children.

International Inventories

US EPA TSCA Inventory: All of the components of this product are listed on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory or exempt.

Canadian Environmental Protection Act: All of the components in this product are listed on the Domestic Substances List (DSL) or exempt.

Australia: All of the components in this product are listed on the Australian Inventory of Chemical Substances (AICS) or exempt.

China: All of the components in this product are listed on the Inventory of Existing Chemical Substances in China (IECSC) or exempt.

European Union: All the components in this product are listed on the EINECS inventory or exempt.

Japan: All of the components in this product are listed on the Japanese Existing and New Chemical Substances (ENCS) inventory or exempt.

Korea: All of the components in this product are listed on the Korean Existing Chemicals List (KECL) or



CaviCide™
Date Prepared: 3/23/16

exempt.

Philippines: All of the components of this product are listed on the Philippines Inventory of Chemicals and Chemical Substances (PICCS) or exempt.

Section 16. Other Information

Effective Date: March 23, 2016

Supersedes Date: June 1, 2015

Revision Summary: Removed prop 65 notice per exposure assessment.

The information and recommendations set forth herein are taken from sources believed to be accurate as of the date of preparation, however, METREX™ RESEARCH makes no warranty with respect to the accuracy or suitability of the recommendations, and assumes no liability to any use thereof.



SAFETY DATA SHEET

Section 1: Chemical Product and Company Information

1.1 Product Identifier

Product Name: CaviWipesXL™

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Product Use: Hard surface cleaner and disinfectant wipe.

1.3 Details of the Supplier of the Substance or Mixture

Manufacturer: METREX™ RESEARCH

28210 Wick Rd

Romulus, MI 48174

U.S.A.

1.4 Emergency Telephone Number (Chemical Spills, Leaks, Fire, Exposure or Accident only):
CHEMTREC: 1-800-424-9300 (in the US) 1-703-527-3887 (Outside the US)

Information Phone Number: 1-800-841-1428 (Customer Service)

SDS Date Of Preparation/Revision: December 16, 2014

Section 2. Hazards Identification

2.1 Classification of the Substance or Mixture

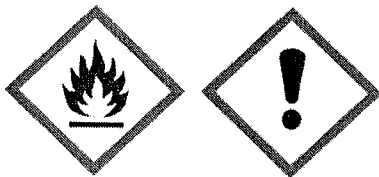
Flammable Liquid Category 3

Eye Irritation Category 2 (2A US)

Specific Target Organ Toxicity Single Exposure Category 3 (Narcotic effects)

2.2 Label Elements

WARNING!



Hazard Phrases

H226 Flammable liquid and vapor.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

Precautionary Phrases

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

P233 Keep container tightly closed.

P261 Avoid breathing vapors.

P264 Wash thoroughly after handling.



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

P280 Wear eye protection.

P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312: Call a POISON CENTER or physician if you feel unwell.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.

P337+P313 If eye irritation persists get medical attention.

P370+P378 In case of fire: Use water spray or fog, alcohol-resistant foam, carbon dioxide or dry chemical to extinguish.

P403+P235 Store in a well ventilated place. Keep cool.

P501 Dispose of contents and container in accordance with local and national regulations.

2.3 Other Hazards: None identified

Section 3. Composition/Information On Ingredients

The following composition refers to the liquid saturant

Component	CAS No.	Amount	GHS Classification
Isopropanol	67-63-0	17.2%	Flam Liquid 2 (H226) Eye Irrit. 2 (H319) STOT SE 3 (H336)
Ethylene Glycol Monobutyl Ether (2-Butoxyethanol)	111-76-2	1-5%	Acute Tox 4 (H302), Acute Tox 3 (H311), Acute Tox. 3 (H331), Skin Irrit. 2 (H315), Eye Irrit. 2 (H319)
Diisobutylphenoxyethoxyethylidim ethylbenzylammonium chloride	121-54-0	0.28%	Acute Tox 3 (H301) Skin Corr 1A (H314) Eye Dam 1 (H318) STOT SE 3 (H335) Aquatic Chronic 2 (H411)
Water	7732-18-5	70-80%	Not classified as hazardous

Section 4. First Aid Measures

4.1 Description of First Aid Measures

Inhalation: Move to fresh air if effects occur and seek medical attention if effects persist.

Skin Contact: Remove contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for further treatment advice.

Eye Contact: 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. Call a poison control center or doctor for treatment advice.



Ingestion: If liquid is swallowed, get medical advice by calling a Poison Control Center or hospital emergency room. If advice is not available, take victim and product container to the nearest emergency treatment center or hospital. Do not attempt to give anything by mouth to an unconscious person.

4.2 Most Important symptoms and effects, both acute and delayed: Causes serious eye irritation. Inhalation of concentrated vapors may cause dizziness and drowsiness.

4.3 Indication of any immediate medical attention and special treatment needed: Immediate medical attention is generally not required.

Section 5. Fire Fighting Measures

5.1 Extinguishing Media: Use water spray or fog, alcohol-resistant foam, carbon dioxide or dry chemical. Cool fire exposed containers with water.

5.2 Special Hazards Arising from the Substance or Mixture: Liquid saturant is a flammable liquid and vapor. Flammable vapors may collect in confined areas if large amounts are used.

5.3 Advice for Fire-Fighters: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored.

Section 6: Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures: Wear appropriate protective clothing and equipment.

6.2 Environmental Precautions: Avoid release to the environment

6.3 Methods and Material for Containment and Cleaning Up: Collect spilled liquid material with an inert absorbent material and collect spilled wipes and place in appropriate, labeled container for disposal. Do not reuse towelette.

Section 7. Handling and Storage

7.1 Precautions for Safe Handling: Avoid contact with eyes. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

Liquid saturant is a flammable liquid and vapor. Keep away from heat, sparks, open flames and all other sources of ignition. Keep containers closed when not in use. Do not reuse towelette.

7.2 Conditions for Safe Storage, Including any Incompatibilities: Store in a cool, well-ventilated area away from heat, oxidizers and all sources of ignition.

7.3 Specific end use(s): Hard surface cleaner and disinfectant.



Section 8. Exposure Controls / Personal Protection

8.1 Control Parameters:

Chemical	Korean Exposure Limit
Isopropanol	200 ppm 8 hr Exposure Limit 400 ppm Short Term Exposure
Ethylene Glycol Monobutyl Ether (2-Butoxyethanol)	20 ppm 8 hr Exposure Limit
Diisobutylphenoxyethoxyethyl dimethyl benzylammonium chloride	None Established
Water	None Established

8.2 Exposure Controls:

Recommended Monitoring Procedures: Collection on charcoal and analysis by gas chromatography.

Appropriate Engineering Controls: General ventilation should be adequate for normal use. For operations where the exposure limits may be exceeded, mechanical ventilation such as local exhaust may be needed to minimize exposure.

Personal Protective Measures

Respiratory Protection: None under normal use conditions with adequate ventilation. For operations where the occupational exposure limits are exceeded, an approved respirator with an organic vapor cartridge or supplied air respirator is recommended. Equipment selection depends on contaminant type and concentration. Select in accordance with applicable regulations and good industrial hygiene practice. For firefighting, use self-contained breathing apparatus.

Eye Protection: None required for normal use. If liquid splashing is possible, wear splash proof goggles to prevent eye contact.

Skin Protection: Impervious gloves such as butyl rubber or nitrile are recommended for operations which may result in prolonged or repeated skin contact.

Other protection: None required for normal use. Wear protective clothing if needed to avoid prolonged/repeated skin contact. Suitable washing and eye flushing facilities should be available in the work area. Contaminated clothing should be removed and laundered before re-use.

Section 9. Physical and Chemical Properties

9.1 Information on basic Physical and Chemical Properties:

The following data applies to the liquid saturant.

Appearance	Clear liquid.	Vapor Pressure	43.3 mmHg @ 20°C (isopropanol)
Odor	Alcohol	Vapor Density:	2.1 (isopropanol)
Odor Threshold	0.001 ppm (ethylene glycol monobutyl ether)	Relative Density /Specific Gravity:	0.972



Appearance	Clear liquid.	Vapor Pressure	43.3 mmHg @ 20°C (isopropanol)
pH	11.0-12.49	Solubility in Water:	Complete
Melting/Freezing Point	Not determined	Partition Coefficient (n-octanol/water	Not determined
Boiling Point:	Not determined	Auto-ignition Temperature	Not determined
Flash Point:	28.3°C (83°F)	Decomposition Temperature	Not determined
Evaporation Rate	<1	Viscosity	Not determined
Flammability (solid/gas)	Not applicable	Explosive Properties	Vapors may explode if confined.
Flammable/Explosive Limits	LEL: 2% UEL: 12.7%	Oxidizing Properties	None
Percent Volatile	>95%		

Section 10. Stability and Reactivity

10.1 Reactivity: Not reactive at ambient temperatures.

10.2 Chemical Stability: Stable

10.3 Possibility of Hazardous Reactions: Not reactive.

10.4 Conditions to Avoid: Heat, sparks, flames and all other sources of ignition.

10.5 Incompatible Materials: Strong oxidizing agents, acids and strong reducing agents.

10.6 Hazardous Decomposition Products: Thermal decomposition will produce carbon monoxide, carbon dioxide, nitrogen oxides, amines, chlorine and hydrogen chloride.

11. Toxicological Information

11.1 Information on Toxicological Effects:

Potential Health Effects:

The following applies to the liquid saturant. The towelette is not hazardous.

Inhalation: May cause irritation of the nose, throat and upper respiratory tract. High vapor concentrations may produce nausea, vomiting, headache, dizziness, drowsiness, weakness, fatigue, narcosis and possible unconsciousness.

Skin Contact: Prolonged or repeated exposure may cause mild irritation.

Eye Contact: May cause irritation with tearing, redness and pain.

Ingestion: Ingestion may cause gastrointestinal disturbances and central nervous system effects such as headache, dizziness, drowsiness and nausea.

Acute Toxicity Values:

Product LD50 Oral Rat >5000 mg/kg
 LD50 Dermal Rabbit >2000 mg/kg
 LC50 inhalation LC50 rat >2.08 mg/L

Skin corrosion/irritation: Product: Non-irritating in a primary irritation study with rabbits. No signs of toxicity or irritation were observed in a dermal toxicity study in rabbits.



Eye damage/ irritation: Product: Moderately irritating in an eye irritation study with rabbits. Effects reversed in 7 days.

Skin Sensitization: Product: Negative in a skin sensitization study with guinea pigs.

Respiratory Sensitization: No data available on the product or components. Not expected to cause respiratory sensitization.

Germ Cell Mutagenicity: Ethylene Glycol Monobutyl Ether: Tested negative in the AMES test, in an in vitro mammalian chromosome aberration assay and in an in vivo mammalian erythrocyte micronucleus test. Isopropanol: Tested negative in the AMES test, in an In vitro mammalian cell gene mutation test and in an in vivo mammalian erythrocyte micronucleus test. Diisobutylphenoxyethoxyethyl dimethyl benzylammonium chloride: Negative in AMES test with or without metabolic activation.

Carcinogenicity: None of the components is listed as a carcinogen or potential carcinogen by IARC, NTP, ACGIH, or OSHA. Ethylene glycol monobutyl ether: The US National Toxicology Program (NTP) conducted a 2-year inhalation chronic toxicity and carcinogenicity study with ethylene glycol monobutyl ether in rats and mice. A significant increase in the incidence of liver hemangiosarcomas was seen in male mice and forestomach tumors in female mice. Based on the mode of action data available, there was no significant hazard for human carcinogenicity.

Developmental / Reproductive Toxicity: Ethylene glycol monobutyl ether: In a 14 week reproductive study, mice were orally administered 720, 1340 and 2050 mg/kg/day. Effects were seen on fertility only at doses which were severely toxic to the animals (1340 and 2050 mg/kg). A NOAEL -720 mg/kg. Diisobutylphenoxyethoxyethyl dimethyl benzylammonium chloride: In a teratology study, rats were given up to 35.6 mg/kg/day from day 6-15 of gestation. Adverse maternal effects were seen at the highest dose.

Specific Target Organ Toxicity (Single Exposure): In an acute toxicity study with rat, the saturant has been shown to cause respiratory irritation.

Specific Target Organ Toxicity (Repeated Exposure): Ethylene Glycol Monobutyl Ether: Ethylene glycol monobutyl ether was administered dermally to male and female rabbits at doses up to 150mg/kg/day for 90 days. The maximum dose tested was the maximum that could be tolerated. No clinical, haematological, clinical chemistry or pathological changes were observed that could be attributed to treatment. NOAEL 150 mg/kg. Isopropanol: In a 104 week inhalation study, rats were exposed to 500, 2500, 5000 ppm for 6hr/day. There no adverse exposure related effects seen at any dose. NOAEL of 5000 ppm.

Section 12. Ecological Information

12.1 Toxicity:

Isopropanol: LC50 fathead minnows 11,130 mg/L/48 hr; LC50 brown shrimp 1400 mg/L/48 hr
Diisobutylphenoxyethoxyethyl dimethyl benzylammonium chloride: LC50 pimephales promelas 1.6 mg/L/96 hr, LC50 lepomis macrochirus 1.4 mg/L/96 hr.

12.2 Persistence and degradability: Isopropanol and 2-butoxyethanol are readily biodegradable in screening tests. Diisobutylphenoxyethoxyethyl dimethyl benzylammonium chloride is not readily biodegradable.



12.3 Bioaccumulative Potential: Isopropanol has an estimated BCF of 3 suggesting that the potential for bioaccumulation is low.

12.4 Mobility in Soil: Isopropanol is expected to have very high mobility in soil.

12.5 Results of PVT and vPvB assessment: None required.

12.6 Other Adverse Effects: None known.

13. Disposal Considerations

13.1 Waste Treatment Methods:

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

Container Disposal: Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. If recycling is not available, discard in trash.

Towelette Disposal: Do not reuse towelette. Dispose of used towelette in trash. Do not flush wipes down toilet.

Section 14. Transport Information

	14.1 UN Number	14.2 UN Proper Shipping Name	14.3 Hazard Class(s)	14.4 Packing Group	14.5 Environmental Hazards
US DOT	None	Not Regulated per alcohol exception (49CFR 173.150(e))	None	None	None
EU ADR/RID	UN1987	Alcohols, n.o.s. (Isopropanol)	3	III	None
IMDG	UN1987	Alcohols, n.o.s. (Isopropanol)	3	III	None
IATA/ICAO	UN1987	Alcohols, n.o.s. (Isopropanol)	3	III	None

DOT MARINE POLLUTANTS: This product does not contain Marine Pollutants as defined in 49 CFR 171.8.

14.6 Special Precautions for User: None identified

14.7 Transport in Bulk According to Annex III MARPOL 73/78 and the IBC Code: None known.

Section 15. Regulatory Information

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

US Regulations

EPA SARA 311/312 Hazard Classification: Fire Hazard, Acute Health, Chronic Health

EPA SARA 313: This Product Contains the Following Chemicals Subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372):

Ethylene Glycol Monobutyl Ether (Glycol Ether) 1-5%



Protection Of Stratospheric Ozone: This product is not known to contain or to have been manufactured with ozone depleting substances as defined in 40 CFR Part 82, Appendix A to Subpart A.

CERCLA SECTION 103: This product is not subject to CERCLA reporting requirements; however, many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

US EPA Registered Pesticide: 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.

CAUTION!

Harmful if absorbed through the skin.

Causes moderate eye irritation.

Keep out of reach of children.

California Prop 65: This product may contain a chemical known to the State of California to cause cancer or birth defects or other reproductive harm.

International Inventories

US EPA TSCA Inventory: All of the components of this product are listed on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory or exempt.

Canadian Environmental Protection Act: All of the components in this product are listed on the Domestic Substances List (DSL) or exempt.

European Union: All the components in this product are listed on the EINECS inventory or exempt.

Australia: All of the components in this product are listed on the Australian Inventory of Chemical Substances (AICS) or exempt.

China: All of the components in this product are listed on the Inventory of Existing Chemical Substances in China (IECSC) or exempt.

Japan: All of the components in this product are listed on the Japanese Existing and New Chemical Substances (ENCS) inventory or exempt.

Korea: All of the components in this product are listed on the Korean Existing Chemicals List (KECL) or exempt.

Philippines: All of the components of this product are listed on the Philippines Inventory of Chemicals and Chemical Substances (PICCS) or exempt.

16. Other Information

NFPA Rating: Fire: 3

Health: 2

Instability: 0



GHS Classification for Reference (See Sections 2 and 3):

Flam. Liq. 2 Flammable Liquid Category 2
Eye Dam 1 Eye Damage Category 1
Eye Irrit. 2 Eye Irritation Category 2
Skin Corr 1A Skin Corrosion Category 1A
Skin Irrit. 2 Skin Irritation Category 2
Acute Tox 3 Acute Toxicity Category 3
Acute Tox 4 Acute Toxicity Category 4
STOT SE 3 Specific Target Organ Toxicity Single Exposure Category 3
Aquatic Chronic 2 Aquatic Chronic Toxicity Category 2

H226 Flammable liquid and vapor.
H301 Toxic if swallowed.
H302 Harmful if swallowed.
H311 Toxic in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.

Effective Date: 12/16/2014

Supersedes Date: 7/9/2012

Revision Summary: New GHS Formatted SDS

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