

# SAFETY DATA SHEET

## 1. Product and Company Identification

<b>PRODUCT NUMBER:</b>	2577	<b>COMPANY PHONE:</b>	1-800-241-8180
<b>PRODUCT NAME:</b>	CLEAN PURSUIT SPRAY	<b>EMERGENCY TELEPHONE:</b>	1-800-535-5053
<b>PRODUCT DESCRIPTION:</b>	Hand Sanitizer and Topical Antiseptic	<b>INFOTRAC:</b>	1-800-535-5053
<b>COMPANY INFORMATION:</b>	<b>PRO CHEM, INC.</b> 1475 Bluegrass Lakes Parkway Alpharetta, GA 30004		

## 2. Hazards Identification

<b>GHS CLASSIFICATION:</b> Flammable Liquids: Category 2	<b>SIGNAL WORD:</b> <b>DANGER</b>	<b>SYMBOL:</b>	
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### HAZARD STATEMENTS:

Highly flammable liquid and vapor.

### PRECAUTIONARY STATEMENTS:

**Prevention:** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/eye protection/face protection.

**Response:** Skin: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

Fire: In case of fire: Use CO<sub>2</sub>, dry chemical or foam to extinguish.

**Storage:** Store in a well-ventilated place. Keep cool.

**Disposal:** Dispose of contents/container to an approved waste disposal plant.

### ADDITIONAL INFORMATION:

Toxic to aquatic life.

#### Unknown acute toxicity:

81.45% of the mixture consists of ingredient(s) of unknown toxicity

0% of the mixture consists of ingredient(s) of unknown acute oral toxicity

81.45% of the mixture consists of ingredient(s) of unknown acute dermal toxicity

81.45% of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

81.45% of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

1.45% of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

## 3. Composition / Information on Ingredients

Chemical Name	CAS	Concentration % by Weight	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Ethanol	64-17-5	80	-	-
Glycerin	56-81-5	1.45	-	-

**Substance:** Not applicable.

## 4. First Aid Measures

### EMERGENCY OVERVIEW:

**EYES:** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area.

**SKIN:** In the case of skin irritation or allergic reactions see a physician.

### INHALATION:

Remove to fresh air. Get medical attention immediately if symptoms occur.

### INGESTION:

Clean mouth with water and drink afterwards plenty of water. Get medical attention immediately if symptoms occur.

### SELF-PROTECTION OF THE FIRST AIDER:

Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information.

### MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED:

No information available.

### INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:

**Note to Physicians:** Treat symptomatically.

## 5. Fire-Fighting Measures

### SUITABLE FIRE EXTINGUISHING MEDIA:

Dry chemical. Carbon dioxide (CO<sub>2</sub>). Water spray. Alcohol resistant foam.

### UNSUITABLE FIRE EXTINGUISHING MEDIA:

Do not scatter spilled material with high pressure water streams.

### SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:

Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

### HAZARDOUS THERMAL DECOMPOSITION PRODUCTS:

Carbon oxides.

**SPECIFIC FIRE-FIGHTING METHODS:**

**Large Fires:** CAUTION: Use of water spray when fighting fire may be inefficient.

**SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS:**

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

**EXPLOSION DATA:**

**Sensitivity to Mechanical Impact:** None.

**Sensitivity to Static Discharge:** Yes.

**6. Accidental Release Measures****PERSONAL PRECAUTIONS:**

Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Ventilate the area.

**METHODS & MATERIALS FOR CONTAINMENT & CLEANUP:**

**Methods for Containment:** Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

**Methods for Cleaning Up:** Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

**7. Handling and Storage****SAFE HANDLING:**

Use personal protection equipment. Avoid contact with skin and eyes. Avoid breathing vapors or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions.

**SAFE STORAGE & INCOMPATIBILITIES:**

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations.

**8. Exposure Controls / Personal Protection**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethanol 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup> (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m <sup>3</sup>	IDLH: 3300 ppm 10% LEL TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>
Glycerin 56-81-5	TWA: 10 mg/m <sup>3</sup> mist	TWA: 15 mg/m <sup>3</sup> mist, total particulate TWA: 5 mg/m <sup>3</sup> mist, respirable fraction (vacated) TWA: 10 mg/m <sup>3</sup> mist, total particulate (vacated) TWA: 5 mg/m <sup>3</sup> mist, respirable fraction	

Chemical Name	Alberta	British Columbia	Ontario TWAEV	Quebec
Ethanol 64-17-5	TWA: 1000 ppm TWA: 1880 mg/m <sup>3</sup>	STEL: 1000 ppm	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1880 mg/m <sup>3</sup>
Glycerin 56-81-5	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup>		TWA: 10 mg/m <sup>3</sup>

**OTHER EXPOSURE GUIDELINES:**

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992). See section 15 for national exposure control parameters.

**PERSONAL PROTECTIVE EQUIPMENT:**

**Eye/Face Protection:** Tight sealing safety goggles.

**Skin/Body Protection:** Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots.

**Hand Protection:** Wear suitable gloves. Impervious gloves.

**Respiratory Protection:** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**General Hygiene Considerations:** Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

**APPROPRIATE ENGINEERING CONTROLS:**

Showers. Eyewash stations. Ventilation systems.

**9. Physical & Chemical Properties**

<b>Appearance:</b>	Colorless.	<b>Flammability(solid/gas):</b>	No data available.
<b>Physical State:</b>	Liquid.	<b>Flammability Limit-lower (%):</b>	No data available.
<b>Color:</b>	No information available.	<b>Flammability Limit-upper (%):</b>	No data available.
<b>Odor:</b>	Alcohol.	<b>Explosive Properties:</b>	No information available.
<b>Odor Threshold:</b>	No data available.	<b>Vapor Density:</b>	No data available.
<b>pH:</b>	7	<b>Vapor Pressure:</b>	No data available.

<b>Melting/Freezing Point:</b>	No data available.	<b>Relative Density:</b>	0.861
<b>Boiling Point/Range:</b>	No data available.	<b>Solubility (water):</b>	Soluble in water.
<b>Kinematic Viscosity:</b>	No data available.	<b>Solubility(ies):</b>	No data available.
<b>Dynamic Viscosity:</b>	No data available.	<b>Auto-Ignition Temp:</b>	No data available.
<b>Flash Point:</b>	20°C/68°F	<b>Decomposition Temp:</b>	No data available.
<b>Oxidizing Properties:</b>	No information available.	<b>Partition Coeff(n-octanol/water):</b>	No data available.
<b>Evaporation Rate:</b>	No data available.	<b>Softening Point:</b>	No information available.
<b>Molecular Weight:</b>	No information available.	<b>VOC Content (%):</b>	No information available.
<b>Liquid Density:</b>	No information available.	<b>Particle Size:</b>	No information available.
<b>Bulk Density:</b>	No information available.	<b>Particle Size Distribution:</b>	No information available.

## 10. Stability & Reactivity Information

### REACTIVITY:

No information available.

### CHEMICAL STABILITY:

Stable under normal 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:

None known based on information supplied.

### HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon oxides.

## 11. Toxicological Information

### PRIMARY ROUTE OF ENTRY:

**Eyes:** Specific test data for the substance or mixture is not available.

**Skin:** Specific test data for the substance or mixture is not available.

**Inhalation:** Specific test data for the substance or mixture is not available.

**Ingestion:** Specific test data for the substance or mixture is not available.

### SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS:

No information available.

### ACUTE TOXICITY:

The following values are calculated based on chapter 3.1 of the GHS document.

ATEmix (oral) 8,736.30 mg/kg

ATEmix (inhalation-dust/mist) 155.90 mg/L

### UNKNOWN ACUTE TOXICITY:

81.45% of the mixture consists of ingredient(s) of unknown toxicity

0% of the mixture consists of ingredient(s) of unknown acute oral toxicity

81.45% of the mixture consists of ingredient(s) of unknown acute dermal toxicity

81.45% of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

81.45% of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

1.45% of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Components	Species	Test Results
Ethanol		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rat	7060 mg/kg
<i>Inhalation</i>		
LC50	Rat	> 570 mg/m3 ( Rat ) 1 h
<i>Oral</i>		
LD50	Rat	
Glycerin		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	> 10 g/kg ( Rabbit )
<i>Inhalation</i>		
LC50	Rat	> 570 mg/m3 ( Rat ) 1 h
<i>Oral</i>		
LD50	Rat	12600 mg/kg

### SKIN CORROSION/IRRITATION:

No information available.

### SERIOUS EYE DAMAGE/EYE IRRITATION:

No information available.

**RESPIRATORY SENSITIZATION:**

No information available.

**SKIN SENSITIZATION:**

No information available.

**GERM CELL MUTAGENICITY:**

No information available.

**CARCINOGENICITY:**

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

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Ethanol 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.**REPRODUCTIVE TOXICITY:**

No information available.

**SPECIFIC TARGET ORGAN TOXICITY -single exposure:**

No information available.

**SPECIFIC TARGET ORGAN TOXICITY -repeated exposure:**

No information available.

**ASPIRATION HAZARD:**

No information available.

**12. Ecological Information****ECOTOXICITY:** Toxic to aquatic life.

Components	Species	Test Results
Ethanol		
<b>Aquatic</b>		
Crustacea	EC50	Daphnia magna 24h EC50: = 10800 mg/L 48h EC50: = 2 mg/L 48h LC50: 9268 - 14221 mg/L
Fish	LC50	Oncorhynchus mykiss Pimephales promelas 96h LC50: 12.0 - 16.0 mL/L 96h LC50: 13400 - 15100 mg/L 96h LC50: > 100 mg/L
Microorganisms		EC50 = 34634 mg/L 30 min EC50 = 35470 mg/L 5 min
Glycerin		
<b>Aquatic</b>		
Crustacea	EC50	Daphnia magna) 24h EC50: > 500 mg/L
Fish	LC50	Oncorhynchus mykiss 96h LC50: 51 - 57 mL/L

**PERSISTENCE AND DEGRADABILITY:**

No information available.

**BIOACCUMULATIVE POTENTIAL:****Component Information:**

Chemical Name	Log Pow
Ethanol	-0.32
Glycerin	-1.76

**MOBILITY IN SOIL:**

No information available.

**OTHER ADVERSE EFFECTS:**

No information available.

**13. Disposal Consideration****HAZARDOUS WASTE CODE:****US EPA Waste Number:** D001**California Waste Codes:** 311

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste
Ethanol 64-17-5	Toxic, Ignitable.

**WASTE FROM RESIDUES/UNUSED PRODUCTS:**

Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**CONTAMINATED PACKAGING:**

Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

#### 14. Transportation Information

**DOT:** UN Number: UN1170  
UN Proper Shipping Name: Ethanol  
Transport Hazard Class(es):  
Class: 3  
Packing Group: II  
Description: UN1170, Ethanol, 3, II  
Emergency Response Guide Number: 127

**TDG:** UN Number: UN1170  
UN Proper Shipping Name: Ethanol Solution  
Transport Hazard Class(es):  
Class: 3  
Packing Group: II  
Description: UN1170, Ethanol, 3, II

**MEX:** UN Number: UN1170  
UN Proper Shipping Name: Ethanol In Solution  
Transport Hazard Class(es):  
Class: 3  
Packing Group: II  
Description: UN1170, Ethanol in Solution, 3, II

**ICAO:** UN Number: UN1170  
UN Proper Shipping Name: Ethanol  
Transport Hazard Class(es):  
Class: 3  
Packing Group: II  
Description: UN1170, Ethanol, 3, II

**IATA:** UN Number: UN1170  
UN Proper Shipping Name: Ethanol  
Transport Hazard Class(es):  
Class: 3  
Packing Group: II  
ERG Code: 3L  
Description: UN1170, Ethanol, 3, II

**IMDG/IMO:** UN Number: UN1170  
UN Proper Shipping Name: Ethanol Solution  
Transport Hazard Class(es):  
Class: 3  
Packing Group: II  
Description: UN1170, Ethanol Solution, 3, II, (20°C C.C.)

**RID:** UN Number: UN1170  
UN Proper Shipping Name: Ethanol Solution  
Transport Hazard Class(es):  
Class: 3  
Packing Group: II  
Classification Code: F1  
Description: UN1170, Ethanol Solution, 3, II  
ADR/RID-Labels: 3

**ADR:** UN Number: UN1170  
UN Proper Shipping Name: Ethanol Solution  
Transport Hazard Class(es):  
Class: 3  
Packing Group: II  
Classification Code: F1  
Tunnel Restriction Code: (D/E)  
Description: 1170, Ethanol Solution, 3, II (D/E)

**ADN:** UN Number: UN1170  
UN Proper Shipping Name: Ethanol Solution  
Transport Hazard Class(es):  
Class: 3  
Packing Group: II  
Classification Code: F1  
Special Provisions: 144, 601  
Description: 1170, Ethanol Solution, 3, II  
Hazard Labels: 3  
Limited Quantity: 1 L  
Ventilation: VE01

## 15. Regulatory Information

### SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE:

#### INTERNATIONAL REGULATIONS:

**The Montreal Protocol on Substances that Deplete the Ozone Layer:** Not applicable.

**The Stockholm Convention on Persistent Organic Pollutants:** Not applicable.

**The Rotterdam Convention:** Not applicable.

#### INTERNATIONAL INVENTORIES:

**TSCA:** Contact supplier for inventory compliance status.

**DSL/NDSL:** Contact supplier for inventory compliance status.

**EINECS/ELINCS:** Contact supplier for inventory compliance status.

**ENCS:** Contact supplier for inventory compliance status.

**KECL:** Contact supplier for inventory compliance status.

**PICCS:** Contact supplier for inventory compliance status.

**AICS:** Contact supplier for inventory compliance status.

#### LEGEND:

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

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

ENCS - Japan Existing and New 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:** Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories:** Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications. Under the amended regulations at 40 CFR 370, EPCRA 311/312 Tier II reporting for the 2017 calendar year will need to be consistent with updated hazard classifications.

**CWA (Clean Water Act):** This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA:** This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional or state level pertaining to releases of this material

#### US STATE REGULATIONS:

##### California Proposition 65

This product contains the following Proposition 65 chemicals. Ethyl alcohol is only a considered a Proposition 65 developmental hazard when ingested as an alcoholic beverage.

Chemical Name	California Proposition 65
Ethanol 64-17-5	Carcinogen, Developmental

#### U.S. STATE RIGHT-TO-KNOW REGULATIONS: This product may contain substances regulated by state right-to-know regulations.

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Ethanol 64-17-5	X	X	X	X	X
Glycerin 56-81-5	X	X	X	X	X

## 16. Other Information

### DISCLAIMER:


To the best of our knowledge, information contained herein is accurate. However, there is no assumption of liability for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazard, which exists. The information contained in this SDS was obtained from current and reliable sources; however, the data is provided without any warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions or handling, storage and disposal of this product are beyond the control of the manufacturer, the manufacturer will not be responsible for loss, injury, or expense arising out of the products improper use. No warranty, expressed or inferred, regarding the product described in this SDS shall be created or inferred by any statement in this SDS. Various government agencies may have specific regulations regarding the transportation, handling, storage, use, or disposal of this product, which may not be covered by this SDS. The user is responsible for full compliance.

# SAFETY DATA SHEET

## 1. Product and Company Identification

<b>PRODUCT NUMBER:</b>	257711	<b>COMPANY PHONE:</b>	1-800-241-8180
<b>PRODUCT NAME:</b>	CLEAN PURSUIT GEL	<b>EMERGENCY TELEPHONE:</b>	1-800-535-5053
<b>PRODUCT DESCRIPTION:</b>	Hand Sanitizer and Tropical Antiseptic	<b>INFOTRAC:</b>	1-800-535-5053
<b>COMPANY INFORMATION:</b>	<b>PRO CHEM, INC.</b> 1475 Bluegrass Lakes Parkway Alpharetta, GA 30004		

## 2. Hazards Identification

<b>GHS CLASSIFICATION:</b> OSHA/HCS Status: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). Flammable Liquids – Category 3 Eye Irritation – Category 2A	<b>SIGNAL WORD:</b> <b>DANGER</b>	<b>SYMBOL:</b>	
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### HAZARD STATEMENTS:

Highly flammable liquid and vapor.

### PRECAUTIONARY STATEMENTS:

**Prevention:** Keep away from heat/sparks/open flames/hot surfaces. Highly flammable liquid and vapor. No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Wear eye protection/face protection.

**Response:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Storage:** Store in a well-ventilated place. Keep cool.

**Disposal:** Dispose of contents and container in accordance with all local, regional national and international regulations.

### HAZARDS NOT OTHERWISE SPECIFIED:

None known.

## 3. Composition / Information on Ingredients

Chemical Name	CAS	Concentration % by Weight
Isopropyl alcohol	67-63-0	74-75

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## 4. First Aid Measures

### EMERGENCY OVERVIEW:

**EYES:** Avoid contact with eyes. IF IN CONTACT WITH EYES: In case of contact with eyes, rinse immediately with plenty of water. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. If irritation persists, get medical attention.

**SKIN:** Avoid contact with skin. IF IN CONTACT WITH SKIN: In case of contact, flush skin with water. Get medical attention if symptoms occur.

### INHALATION:

Avoid breathing vapor or mist. IF INHALED: In case of accident by inhalation, remove victim to fresh air and keep at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

### INGESTION:

Do not ingest. IF INGESTED: If swallowed, do not induce vomiting. Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately.

### MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED:

#### Potential Acute Health Effects:

**Eye Contact:** No known significant effects or critical hazards.

**Inhalation:** No known significant effects or critical hazards.

**Skin Contact:** No known significant effects or critical hazards.

**Ingestion:** No known significant effects or critical hazards.

#### Over-exposure Signs/Symptoms:

**Eye Contact:** No known significant effects or critical hazards.

**Inhalation:** No known significant effects or critical hazards.

**Skin Contact:** No known significant effects or critical hazards.

**Ingestion:** No known significant effects or critical hazards.

### INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:

**Notes to Physician:** Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific Treatments:** No specific treatment.

**Protection of First-aiders:** No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

## 5. Fire-Fighting Measures

### SUITABLE FIRE EXTINGUISHING MEDIA:

Use dry chemical, CO<sub>2</sub> water spray (fog) or foam.

### UNSUITABLE FIRE EXTINGUISHING MEDIA:

Do not use water jet or water-based fire extinguishers.

### SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:

Highly flammable liquid and vapor. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.

### HAZARDOUS THERMAL DECOMPOSITION PRODUCTS:

Decomposition products may include the following materials: carbon dioxide, carbon monoxide, metal oxide/oxides.

### SPECIFIC FIRE-FIGHTING METHODS:

Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

### SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## 6. Accidental Release Measures

### PERSONAL PRECAUTIONS:

**For Non-emergency Personal:** No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flames, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate personal protective equipment.

**For Emergency Responders:** If specialized clothing is required to deal with spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

### ENVIRONMENTAL PRECAUTIONS:

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### METHODS AND MATERIALS FOR CONTAINMENT AND CLEANUP:

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## 7. Handling and Storage

### SAFE HANDLING:

**Protective Measures:** Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Advice on General Occupational Hygiene:** Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and/or smoking. Remove contaminated clothing and protective equipment before entering eating areas. See Section 8 for additional information on hygiene measures.

### SAFE STORAGE AND INCOMPATIBILITIES:

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready to use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## 8. Exposure Controls / Personal Protection

### Occupational Exposure Limits:

#### Ingredient Name:

Isopropyl Alcohol

#### Exposure Limits:

ACGIH TLV (United States, 3/2012).

STEL: 1000 ppm 15 minutes

NIOSH REL (United States, 6/2009).

TWA: 1900 mg/m<sup>3</sup> 10 hours

TWA: 1000 ppm 10 hours

OSHA PEL (United States, 6/2010).

TWA: 1900 mg/m<sup>3</sup> 8 hours

TWA 1000 ppm 8 hours

### PERSONAL PROTECTIVE EQUIPMENT:



**Eye/Face Protection:** Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

### Skin Protection:

**Hand Protection:** Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.



**Body Protection:** Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other Skin Protection:** Appropriate footwear and any other additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory Protection:** Use a properly fitted, air purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**General Hygiene Considerations:** Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location.

**APPROPRIATE ENGINEERING CONTROLS:**

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**ENVIRONMENTAL EXPOSURE CONTROLS:**

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

**9. Physical & Chemical Properties**

<b>Physical State:</b>	Liquid (Clear).	<b>Flammability(solid/gas):</b>	Not applicable.
<b>Color:</b>	Clear.	<b>Lower and Upper Explosive (Flammable) Limits:</b>	Not available.
<b>Odor:</b>	Alcohol.	<b>Viscosity:</b>	Water.
<b>Odor Threshold:</b>	Not applicable.	<b>Vapor Density:</b>	>1 [Air = 1]
<b>pH:</b>	3 [Conc. (% w/w): 1%]	<b>Vapor Pressure:</b>	4.4 kPa (33 mm Hg) [room temperature]
<b>Melting Point:</b>	Not applicable.	<b>Relative Density:</b>	0.792
<b>Boiling Point:</b>	78°C (172.4°F)	<b>Solubility (water):</b>	100 g/l
<b>Flash Point:</b>	Closed cup: 10°C (50°F) [Pensky-Martens.]	<b>Auto-Ignition Temp:</b>	Not available.
<b>Evaporation Rate:</b>	Not available.	<b>Decomposition Temp:</b>	Not available.
<b>Burning Time:</b>	Not applicable.	<b>Partition Coeff(n-octanol/water):</b>	Not available.
<b>Burning Rate:</b>	Not applicable.	<b>SADT:</b>	Not available.

**10. Stability & Reactivity Information**

**REACTIVITY:**

No specific test data related to reactivity available for this product or its ingredients.

**CHEMICAL STABILITY:**

This product is stable.

**POSSIBILITY OF HAZARDOUS REACTIONS:**

Under normal conditions of storage and use, hazardous reactions will not occur.

**CONDITIONS TO AVOID:**

Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

**INCOMPATIBLE MATERIALS:**

Reactive or incompatible with the following materials: oxidizing materials, acids and alkalis.

**HAZARDOUS DECOMPOSITION PRODUCTS:**

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**11. Toxicological Information**

**PRIMARY ROUTE OF ENTRY:** Routes of entry anticipated: Oral, Dermal and Inhalation.

**Eyes:** No known significant effects or critical hazards.

**Skin:** No known significant effects or critical hazards.

**Inhalation:** No known significant effects or critical hazards.

**Ingestion:** No known significant effects or critical hazards.

**SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS:**

**Eye Contact:** No known significant effects or critical hazards.

**Inhalation:** No known significant effects or critical hazards.

**Skin Contact:** No known significant effects or critical hazards.

**Ingestion:** No known significant effects or critical hazards.

**ACUTE TOXICITY:**

Product	Species	Test Results	Exposure
Isopropyl Alcohol			
<b>Acute</b>			
<i>Inhalation Vapor</i>			
LC50	Rat	124700 mg/m <sup>3</sup>	4 hours
<i>Oral</i>			
LD50	Rat	7 g/kg	-

**IRRITATION/CORROSION:**

Chemical Name:	Oral LD50	Dermal LD50	Inhalation LC50
Isopropyl Alcohol	= 7060 mg/kg (Rat)	-	= 124.7 mg/L (Rat) 4h
Glycerin	= 12600 mg/kg (Rat)	>10 g/kg (Rabbit)	>570 mg/m <sup>3</sup> (Rat) 1h

**SENSITIZATION:**

There is no applicable data.

**MUTAGENICITY:**

There is no applicable data.

**CARCINOGENICITY:**

There is no applicable data.

**REPRODUCTIVE TOXICITY:**

There is no applicable data.

**TERATOGENICITY:**

There is no applicable data.

Name:	Category:	Route of Exposure:	Target Organs:
Isopropyl Alcohol	Category 3	Not applicable.	Narcotic effects.

**SPECIFIC TARGET ORGAN TOXICITY -repeated exposure:**

There is no applicable data.

**ASPIRATION HAZARD:**

There is no applicable data.

**POTENTIAL ACUTE HEALTH EFFECTS:**

**Eye Contact:** No known significant effects or critical hazards.

**Inhalation:** No known significant effects or critical hazards.

**Skin Contact:** No known significant effects or critical hazards.

**Ingestion:** No known significant effects or critical hazards.

**DELAYED AND IMMEDIATE EFFECTS AND ALSO CHRONIC EFFECTS FROM SHORT AND LONG TERM EXPOSURE:****SHORT TERM EXPOSURE:**

**Potential Immediate Effects:** No known significant effects or critical hazards.

**Potential delayed Effects:** No known significant effects or critical hazards.

**LONG TERM EXPOSURE:**

**Potential Immediate Effects:** No known significant effects or critical hazards.

**Potential delayed Effects:** No known significant effects or critical hazards.

**POTENTIAL CHRONIC EFFECTS:**

**General:** No known significant effects or critical hazards.

**Carcinogenicity:** No known significant effects or critical hazards.

**Mutagenicity:** No known significant effects or critical hazards.

**Teratogenicity:** No known significant effects or critical hazards.

**Developmental Effects:** No known significant effects or critical hazards.

**Fertility Effects:** No known significant effects or critical hazards.

**NUMERICAL MEASURES OF TOXICITY:**

**Acute Toxicity Estimates:** There is no applicable data.

**12. Ecological Information****TOXICITY:**

Chemical Name:	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Isopropyl Alcohol	-	96h LC50: 12.0-16.0 mL/L (Oncorhynchus mykiss) 96h LC50: 13400 – 15100 mg/L (Pimephales promelas) 96h LC50: >100 mg/L (Pimephales promelas)	EC50 = 34634 mg/L 30 min EC50 = 35470 mg/L 5 min	24h EC50: =10800 mg/L (Daphnia magna) 48h EC50: = 2mg/L (Daphnia magna) 48h LC50: 9268 – 14221 mg/L (Daphnia magna)
Glycerin	-	96h LC50: 51-57 mL/L (Oncorhynchus mykiss)	-	24h EC50: > 500 mg/L (Daphnia magna)

**PERSISTENCE AND DEGRADABILITY:**

There is no data available.

**BIOACCUMULATIVE POTENTIAL:**

Product/Ingredient Name:	LogPow	BCF	Potential
Isopropyl Alcohol	-0.32	-	Low
Glycerin	-1.76	-	Low

**MOBILITY IN SOIL:**

Soil/water partition coefficient (Koc): Not available.

**OTHER ADVERSE EFFECTS:**

No known significant effects or critical hazards.

**13. Disposal Consideration****DISPOSAL INSTRUCTIONS:**

The generation of waste should be avoided or minimized whenever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed in a safe wall. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld, or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## 14. Transportation Information

**DOT:** UN Number: UN1219  
**UN Proper Shipping Name:** Isopropanol Solutions  
**Transport Hazard Class(es):**  
 Class: 3  
**Packing Group:** II  
**Environmental Hazards:** No.

**IATA:** UN Number: UN1219  
**UN Proper Shipping Name:** Isopropanol Solutions  
**Transport Hazard Class(es):**  
 Class: 3  
**Packing Group:** II  
**Environmental Hazards:** No.

**IMDG:** UN Number: UN1219  
**UN Proper Shipping Name:** Isopropanol Solutions  
**Transport Hazard Class(es):**  
 Class: 3  
**Packing Group:** II  
**Environmental Hazards:** No.



**SPECIAL PRECAUTIONS FOR USER: Transport with user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE:**  
 Not available.

## 15. Regulatory Information

### US FEDERAL REGULATIONS:

**TSCA: 8(a) CDR Exempt/Partial Exemption:** Not determined.  
**United States Inventory (TSCA 8b):** Not determined.  
**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List:** Not listed.  
**Clean Air Act (CAA) Section 602 Class I Substances:** Not listed.  
**Clean Air Act (CAA) Section 602 Class II Substances:** Not listed.  
**DEA List I Chemicals (Precursor Chemicals):** Not listed.  
**DEA List II Chemicals (Essential Chemicals):** Not listed.

### SARA 302/304:

**Composition/Information on Ingredients:** No products were found.  
**SARA 304 RQ:** Not applicable.  
**SARA 311/312:**  
**Classification:** Fire Hazard.

Name	%	Fire Hazard	Sudden Release of Pressure	Reactive	Immediate (acute) Health Hazards	Delayed (chronic) Health Hazard
Isopropyl Alcohol 67-63-0	74-75	Yes.	No.	No.	Yes.	No.

### STATE REGULATIONS:

**Massachusetts:** The following components are listed: Isopropyl Alcohol.  
**New York:** None of the components are listed.  
**New Jersey:** The following components are listed: Isopropyl Alcohol.  
**Pennsylvania:** The following components are listed: Isopropyl Alcohol.  
**California Prop. 65:** No products were found.

### INTERNATIONAL REGULATIONS:

**International Lists:** **Australia Inventory (AICS):** Not determined.  
**China Inventory (IECSC):** Not determined.  
**Japan Inventory:** Not determined.  
**Korea Inventory:** Not determined.  
**Malaysia Inventory (EHS Register):** Not determined.  
**New Zealand Inventory of Chemicals (NZIoC):** Not determined.  
**Philippines Inventory (PICCS):** Not determined.  
**Taiwan Inventory (CSNN):** Not determined.  
**Chemical Weapons Convention List Schedule I Chemicals:** Not listed.  
**Chemical Weapons Convention List Schedule II Chemicals:** Not listed.  
**Chemical Weapons Convention List Schedule III Chemicals:** Not listed.

## 16. Other Information

### Key to Abbreviations:

**ATE = Acute Toxicity Estimate**  
**BCF = Bioconcentration Factor**  
**GHS = Globally Harmonized System of Classification and Labelling of Chemicals**  
**IATA = International Air Transport Association**  
**IBC = Intermediate Bulk Container**  
**IMDG = International Maritime Dangerous Goods**  
**LogPow = logarithm of the octanol/water partition coefficient**  
**MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.**  
**('Marpol' = marine pollution)**  
**UN = United Nations**

### DISCLAIMER:

To the best of our knowledge, information contained herein is accurate. However, there is no assumption of liability for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All

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