


SAFETY DATA SHEET

1. Product and Company Identification

PRODUCT NUMBER:	257701	COMPANY PHONE:	1-800-241-8180
PRODUCT NAME:	CLEAN PURSUIT SPRAY	EMERGENCY TELEPHONE:	1-800-535-5053
PRODUCT DESCRIPTION:	Hand Sanitizer and Tropical Antiseptic	INFOTRAC:	1-800-535-5053
COMPANY INFORMATION:	PRO CHEM, INC. 1475 Bluegrass Lakes Parkway Alpharetta, GA 30004		

2. Hazards Identification

GHS CLASSIFICATION: 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	SIGNAL WORD: DANGER	SYMBOL:	
HAZARD STATEMENTS: Highly flammable liquid and vapor.			
PRECAUTIONARY STATEMENTS: Prevention: Keep away from heat/sparks/open flames/hot surfaces. 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, CO₂ 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 flares, 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/m³ 10 hours

TWA: 1000 ppm 10 hours

OSHA PEL (United States, 6/2010).

TWA: 1900 mg/m³ 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

Physical State:	Liquid (Clear).	Flammability(solid/gas):	Not applicable.
Color:	Clear.	Lower and Upper Explosive (Flammable) Limits:	Not available.
Odor:	Alcohol.	Viscosity:	Water.
Odor Threshold:	Not applicable.	Vapor Density:	>1 [Air = 1]
pH:	3 [Conc. (% w/w): 1%]	Vapor Pressure:	4.4 kPa (33 mm Hg) [room temperature]
Melting Point:	Not applicable.	Relative Density:	0.792
Boiling Point:	78°C (172.4°F)	Solubility (water):	100 g/l
Flash Point:	Closed cup: 10°C (50°F) [Pensky-Martens.]	Auto-Ignition Temp:	Not available.
Evaporation Rate:	Not available.	Decomposition Temp:	Not available.
Burning Time:	Not applicable.	Partition Coeff(n-octanol/water):	Not available.
Burning Rate:	Not applicable.	SADT:	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			
Acute			
<i>Inhalation Vapor</i>			
LC50	Rat	124700 mg/m ³	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 ³ (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 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

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

2. Hazards Identification

GHS CLASSIFICATION:

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

SIGNAL WORD:

DANGER

SYMBOL:



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

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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, CO₂ 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

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TWA: 1900 mg/m³ 10 hours

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OSHA PEL (United States, 6/2010).

TWA: 1900 mg/m³ 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

Physical State:	Liquid (Clear).	Flammability(solid/gas):	Not applicable.
Color:	Clear.	Lower and Upper Explosive (Flammable) Limits:	Not available.
Odor:	Alcohol.	Viscosity:	Water.
Odor Threshold:	Not applicable.	Vapor Density:	>1 [Air = 1]
pH:	3 [Conc. (% w/w): 1%]	Vapor Pressure:	4.4 kPa (33 mm Hg) [room temperature]
Melting Point:	Not applicable.	Relative Density:	0.792
Boiling Point:	78°C (172.4°F)	Solubility (water):	100 g/l
Flash Point:	Closed cup: 10°C (50°F) [Pensky-Martens.]	Auto-Ignition Temp:	Not available.
Evaporation Rate:	Not available.	Decomposition Temp:	Not available.
Burning Time:	Not applicable.	Partition Coeff(n-octanol/water):	Not available.
Burning Rate:	Not applicable.	SADT:	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			
Acute			
<i>Inhalation Vapor</i>			
LC50	Rat	124700 mg/m ³	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 ³ (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

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.