

R&D Hand Sanitizer

SECTION 1. IDENTIFICATION

Product Identifier	R&D Hand Sanitizer
Product Family	Cleaners & Sealers
Recommended Use	For personal hand hygiene to kill germs and help prevent the spread of harmful bacteria.
Restrictions on Use	Do not use on children under 2 years of age.
Manufacturer	R&D Technical Solutions Ltd., 7000 Davand Drive, Mississauga, ON, L5T 1J5, 905-795-9900, www.rdsolutions.ca
Emergency Phone No.	CANUTEC, 1-613-996-6666, 24 HR
Date of Preparation	August 06, 2020

SECTION 2. HAZARD IDENTIFICATION

Classification

Flammable liquid - Category 2; Eye irritation - Category 2; Specific target organ toxicity (single exposure) - Category 3

Label Elements



Signal Word:

Danger

Hazard Statement(s):

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

Precautionary Statement(s):

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

P233 Keep container tightly closed.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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 advice or attention.

P370 + P378 In case of fire: Use water, appropriate foam, dry chemical powder, carbon dioxide to extinguish.

Storage:

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

Disposal:

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

Other Hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

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Mixture:

Chemical Name	CAS No.	%	Other Identifiers	Other Names
2-Propanol	67-63-0	45.0-70.0		
Glycerol	56-81-5	1.0-5.0		
Hydrogen Peroxide	7722-84-1	0.01-1.0		

Notes

Concentrations are expressed in % weight/weight.

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Remove source of exposure or move to fresh air. Keep at rest in a position comfortable for breathing. Call a Poison Centre or doctor if you feel unwell.

Skin Contact

If skin irritation occurs, get medical advice or attention.

Eye Contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice or attention.

Ingestion

Get medical advice or attention if you feel unwell or are concerned. For larger quantities: do not give anything orally. Seek medical attention IMMEDIATELY.

First-aid Comments

Get medical advice or attention if you feel unwell or are concerned.

Most Important Symptoms and Effects, Acute and Delayed

If swallowed: large amounts can irritate the nose and throat. Large amounts can harm the nervous system. Symptoms may include headache, nausea, dizziness, drowsiness and confusion.

Immediate Medical Attention and Special Treatment

Target Organs

Nervous system.

Special Instructions

Not applicable.

Medical Conditions Aggravated by Exposure

Skin allergies.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog.

Unsuitable Extinguishing Media

Do not use direct water stream - may cause fire to spread.

Specific Hazards Arising from the Product

Can ignite if strongly heated. Highly flammable liquid and vapour. Can ignite at room temperature. Releases vapour that can form explosive mixture with air.

Very toxic carbon monoxide, carbon dioxide.

Special Protective Equipment and Precautions for Fire-fighters

Evacuate area. Use water spray to dilute spills to non-flammable mixtures. Use water spray to flush spills away from

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ignition sources.

Fire-fighters may enter the area if positive pressure SCBA and full Bunker Gear is worn.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Non-emergency personnel: use the personal protective equipment recommended in Section 8 of this safety data sheet.
Emergency responders: use the personal protective equipment recommended in Section 8 of this safety data sheet.
Eliminate all ignition sources if safe to do so. Increase ventilation to area or move leaking container to a well-ventilated and secure area.

Environmental Precautions

Do not allow into any sewer, on the ground or into any waterway. If the spill is inside a building, prevent product from entering drains, ventilation systems and confined areas.

Methods and Materials for Containment and Cleaning Up

Stop or reduce leak if safe to do so. Contain and soak up spill with absorbent that does not react with spilled product. Cover the spill surface with the appropriate type of foam to reduce the release of vapour. Place used absorbent into suitable, covered, labelled containers for disposal. Contaminated absorbent poses the same hazard as the spilled product. Suitable absorbents are: clay, dirt, sand, Milsorb®.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid breathing in this product. Do not get in eyes. Only use where there is adequate ventilation. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Conditions for Safe Storage

Store in an area that is: cool, ventilated, out of direct sunlight and away from heat and ignition sources.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
2-Propanol	200 ppm	400 ppm				
Hydrogen Peroxide	1 ppm Not established					
Glycerol	10 mg/m3 (V)		5 mg/m3 (R)			

Consult local authorities for provincial or state exposure limits.

Appropriate Engineering Controls

General ventilation is usually adequate. Provide eyewash and safety shower if contact or splash hazard exists.

Individual Protection Measures

Eye/Face Protection

Not required if product is used as directed.

Skin Protection

Not required, if used as directed. In case of an emergency (e.g. an uncontrolled release): use personal protective equipment as required.

Respiratory Protection

Not normally required if product is used as directed. For non-routine or emergency situations: wear a NIOSH approved air-purifying respirator with an appropriate cartridge.

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	Clear colourless liquid.
Odour	Alcoholic
Odour Threshold	Not available
pH	Not available
Melting Point/Freezing Point	Not available (melting); Not available (freezing)
Initial Boiling Point/Range	≥ 82 °C (180 °F)
Flash Point	> 18 °C (64 °F)
Evaporation Rate	Not available
Flammability (solid, gas)	Not applicable (liquid).
Upper/Lower Flammability or Explosive Limit	Not available (upper); Not available (lower)
Vapour Pressure	Not available
Vapour Density (air = 1)	Not available
Relative Density (water = 1)	~ 0.845
Solubility	Soluble in all proportions in water; Not available (in other liquids)
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	Not available (kinematic); Not available (dynamic)
Other Information	
Physical State	Liquid

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions of use.

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

None known.

Conditions to Avoid

High temperatures. Freezing. Open flames, sparks, static discharge, heat and other ignition sources. Contact with combustible materials.

Incompatible Materials

Avoid contact with: strong acids (e.g. hydrochloric acid), aldehydes (e.g. acetaldehyde), oxidizing agents (e.g. peroxides), amines (e.g. triethylamine).

Hazardous Decomposition Products

Can include, but not limited to: very toxic carbon monoxide, carbon dioxide.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Skin contact; eye contact; ingestion.

Acute Toxicity

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Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
2-Propanol	72600 mg/m ³ (rat) (4-hour exposure)	1870 mg/kg (rat)	4059 mg/kg (rabbit)
Hydrogen Peroxide	50 mg/L (mist)	50 600 mg/kg	
Glycerol		4090 mg/kg (mouse)	

Inhalation ATEmix = 16962.89 mg/L (4-hour exposure) (dust/mist)

Oral ATEmix = 2658.65 mg/kg

Dermal ATEmix = 5843.82 mg/kg

Skin Corrosion/Irritation

May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.

Serious Eye Damage/Irritation

May cause serious eye irritation based on information for closely related materials. (2-Propanol) symptoms include sore, red eyes, and tearing.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

At high concentrations may cause nose and throat irritation. Symptoms may include headache, nausea, dizziness, drowsiness and confusion.

Skin Absorption

Prolonged skin contact is unlikely to result in absorption of harmful amounts.

Ingestion

May cause nausea, irritation. Symptoms may include headache, nausea, dizziness, drowsiness and confusion.

Aspiration Hazard

No information was located.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

Repeated ingestion or swallowing large amounts may injure internally. May cause effects similar to STOT (Specific Target Organ Toxicity) - Single Exposure, as described above. In severe cases, symptoms may include shortness of breath, chest pain, rapid or irregular heartbeat, dizziness and loss of appetite.

Respiratory and/or Skin Sensitization

Not known to be a respiratory sensitizer. Not known to be a skin sensitizer.

Carcinogenicity

Not known to cause cancer.

Key to Abbreviations

IARC = International Agency for Research on Cancer. Group 3 = Not classifiable as to its carcinogenicity to humans.

Reproductive Toxicity

Development of Offspring

Based on available data, the classification criteria are not met. May cause effects on the unborn child based on information for closely related chemicals. (2-Propanol) has been associated with: decreased weight.

Sexual Function and Fertility

No information was located.

Effects on or via Lactation

No information was located.

Germ Cell Mutagenicity

No information was located.

Interactive Effects

No information was located.

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SECTION 12. ECOLOGICAL INFORMATION

This product has not been tested.

Ecotoxicity

This product is not expected to present an environmental hazard.

Persistence and Degradability

No information was located.

Bioaccumulative Potential

No information was located.

Mobility in Soil

No information was located.

Other Adverse Effects

There is no information available.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of contents and container in accordance with local, regional, national and international regulations. This product and its container must be disposed of as hazardous waste. Do NOT dump into any sewers, on the ground or into any body of water.

SECTION 14. TRANSPORT INFORMATION

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
Canadian TDG	UN1219	Isopropanol	3	II
US DOT	UN1219	Isopropanol	3	II

Special Precautions Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

Other Information Limited Quantity exemption: 5 Litres

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

Canada

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

All ingredients are listed on the DSL or are not required to be listed.

USA

Toxic Substances Control Act (TSCA) Section 8(b)

All ingredients are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.

SECTION 16. OTHER INFORMATION

SDS Prepared By Compliance & Documentation Coordinator
Phone No. 905-795-9900
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Key to Abbreviations OSHA = US Occupational Safety and Health Administration

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References

NIOSH = National Institute for Occupational Safety and Health
CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS).
Registry of Toxic Effects of Chemical Substances (RTECS®) database. Accelrys, Inc. Available
from Canadian Centre for Occupational Health and Safety (CCOHS).

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