MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : L-Hygiene (Hand Sanitizer and disinfectant)
Synonyms : Hand Sanitizer and general purpose disinfectant
Product code : LCHD1

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Hand Sanitizer and general purpose disinfectant
Ready-to-use solution, for hand sanitization to decrease microorganisms on hand.
For professional use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

LOBA CHEMIE PVT.LTD.
107 Wode House Road, Jehangir Villa, Colaba
400005 Mumbai - INDIA
T: +91 22 6663 6663
info@l-hygiene.com ; www.l-hygiene.com

1.4. Emergency telephone number

Emergency number :+91 22 6663 6663

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Serious eye damage/eye irritation	Category 2A
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

2.2. Hazards not otherwise classified (HNOC)

Not applicable

2.3. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms:

GHS02

GHS07

Signal Word: Danger

Hazard statements:

H225 - Highly flammable liquid and vapour.
H319 - Causes serious eye irritation.
H336 - May cause drowsiness or dizziness.

Precautionary statements:

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed. Store locked up

Precautionary Statements - Disposal

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

Other information

May be harmful if swallowed. Causes mild skin irritation.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable (mixture).

3.2. Mixtures

Composition:

Chemical Name	Common Name	CAS No.	Concentration
Isopropyl Alcohol	2-Propanol	67-63-0	75 % v/v
Water		7732-18-5	Q.S. to 100 ml
Glycerin	Glycerol	56-81-5	1.45 % v/v
Hydrogen Peroxide		7722-84-1	0.125 % v/v

SECTION 4: FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.
NEVER induce swallowing if the victim is unconscious.

4.1. Description of first aid measures

In the event of exposure by inhalation:

Remove to fresh air. IF exposed or concerned: Get medical advice/attention.

In the event of splashes or contact with 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. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

In the event of splashes or contact with skin:

None under normal use conditions. If skin irritation occurs: Get medical advice/attention.

In the event of swallowing:

Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician.

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. Avoid contact with skin, eyes or clothing.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms

May cause redness and tearing of the eyes. Burning sensation. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Prolonged contact may cause redness and irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Specific and immediate treatment:

No data available.

Information for the doctor:

Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable methods of extinction

Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam.

Unsuitable methods of extinction

Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

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.

5.3. Explosion data

Sensitivity to mechanical impact

None

Sensitivity to static discharge

Yes

5.4. Advice for firefighters

Special protective equipment for fire-fighters

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

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.

Other information
Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

6.2. Environmental precautions

Prevent release to the environment by using barrie

6.3. Methods and material for containment and cleaning up

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.

6.4 Reference to other sections

Refer to sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling
Use personal protection equipment. 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. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. In case of insufficient ventilation, wear suitable respiratory equipment.

7.2. Conditions for safe storage, including any incompatibilities

Storage/Packaging Conditions
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 labelled 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.

7.3. Specific end use(s)

Storage/Packaging
No data available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits:

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Isopropyl alcohol 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m3 (vacated) TWA: 400 ppm (vacated) TWA: 980mg/m (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m3	IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m3 STEL: 500 ppm STEL: 1225 mg/m3
Glycerol 56-81-5	-	TWA: 15 mg/m3mist, total particulate TWA: 5 mg/m3mist, respirable fraction (vacated) TWA: 10 mg/m3mist, total particulate (vacated) TWA: 5 mg/m3mist, respirable fraction	-
Hydrogen peroxide 7722-84-1	TWA: 1 ppm	TWA: 1 ppm TWA: 1.4 mg/m3 (vacated) TWA: 1 ppm (vacated) TWA: 1.4 mg/m3	IDLH: 75 ppm TWA: 1 ppm TWA: 1.4 mg/m3

8.2. Appropriate engineering controls

Engineering controls:

Showers
Eyewash stations
Ventilation systems

8.3. Individual protection measures, such as personal protective equipment

Eye/face protection:

Tight sealing safety goggles.

Hand protection:

Wear suitable gloves.

Skin and body protection:

Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots.

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:

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. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance:

Physical state	Liquid
Colour	Permitted Colour
Odor	Alcohol
Odor threshold	No data available

Property	Values	Remarks / Method
pH	No data available	None known
Melting point / freezing point	No data available	None known
Boiling point / boiling range	82.5 °C / 180.5°F	
Flash point	19 °C / 66.2 °F	
Evaporation rate	No data available	None known
Flammability (solid, gas	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	No data available	None known
Water solubility	No data available	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known

9.2. Other information

Explosive properties	No information available.
Oxidizing properties	No information available.
Softening point	No information available.
Molecular weight	No information available
VOC Content (%)	No information available.
Liquid Density	No information available.
Bulk density	No information available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

None under normal use conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal processing.

10.4. Conditions to avoid

Avoid:
- Heat, flames and sparks.

10.5. Incompatible materials

Avoid contact with:
- Acids. Strong oxidizing agents, Isocyanates, acetaldehyde, chlorine, ethylene oxide, acids

10.6. Hazardous decomposition products

Thermal-oxidation degradation can produce oxides of carbon. Toxic gases and vapors(I.e. Carbon monoxide) may be released in a fire.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on likely routes of exposure

11.1.1. Product Information

Inhalation: Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract. May cause drowsiness or dizziness.

Eye contact: Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.

Skin contact: Specific test data for the substance or mixture is not available. Causes mild skin irritation. Prolonged contact may cause redness and irritation.

Ingestion: Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May be harmful if swallowed.

11.1.2. Symptoms related to the physical, chemical and toxicological characteristics

Symptoms: May cause redness and tearing of the eyes. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Prolonged contact may cause redness and irritation.

11.1.3. Acute toxicity

Numerical measures of toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Isopropyl alcohoL 67-63-0	= 1870 mg/kg (Rat)	= 4059 mg/kg (Rabbit	= 72600 mg/m3 (Rat) 4 h
Water 7732-18-5	> 90 mL/kg (Rat	-	-
Glycerol 56-81-5	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 570 mg/m3 (Rat) 1 h
Hydrogen peroxide 7722-84-1	= 1518 mg/kg (Rat)	= 9200 mg/kg (Rabbit)	= 2000 mg/m3 (Rat) 4 h

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

Skin corrosion/irritation: Classification based on data available for ingredients. May cause skin irritation.
Serious eye damage/eye irritation: Classification based on data available for ingredients. Causes serious eye irritation.
Respiratory or skin sensitization: No information available.
Germ cell mutagenicity: No information available.
Carcinogenicity: No information available.

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

Chemical name	ACGIH	IARC	NTP	OSHA
Isopropyl alcohol 67-63-0	-	Group 3	-	-
Hydrogen peroxide 7722-84-1	A3	Group 3	-	-

Legend
ACGIH (American Conference of Governmental Industrial Hygienists)
A3 - Animal Carcinogen
IARC (International Agency for Research on Cancer)
Group 3 - Not Classifiable as to Carcinogenicity in Humans

Reproductive toxicity: No information available.
STOT - single exposure: May cause drowsiness or dizziness.
STOT - repeated exposure: No information available.
Target organ effects: Respiratory system, Eyes, Skin.
Aspiration hazard: No information available.
Other adverse effects: No information available.
Interactive effects: No information available.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Ecotoxicity

The environmental impact of this product has not been fully investigated.

12.1.1.

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
Isopropyl alcohol 67-63-0	EC50: >1000mg/L (96h, Desmodesmus subspicatus) EC50: >1000mg/L (72h, Desmodesmus subspicatus)	LC50: =9640mg/L (96h, Pimephales promelas) LC50: =11130mg/L (96h, Pimephales promelas) LC50: >1400000 g/L (96h, Lepomis macrochirus)	-	EC50: =13299mg/L (48h, Daphnia magna)
Glycerol 56-81-5	-	LC50: 51 - 57mL/L (96h, Oncorhynchus mykiss)	-	-
Hydrogen peroxide 7722-84-1	-	LC50: 18 - 56mg/L (96h, Lepomis macrochirus) LC50: =16.4mg/L (96h, Pimephales promelas) LC50: 10.0 - 32.0mg/L (96h, Oncorhynchus mykiss)	-	EC50: 18 - 32mg/L (48h, Daphnia magna)

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

There is no data for this product.

Component Information

Chemical name	Partition coefficient
Isopropyl alcohol 67-63-0	0.05
Glycerol 56-81-5	-1.76

12.6. Other adverse effects

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

12.1. Toxicity

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC, Decision 2014/955/EU and Directive (EU) 2015/1127.

13.1. Waste treatment methods

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.

SECTION 14: TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2017 - IMDG 2016 - ICAO/IATA 2017).

Note: This is a consumer product and as such may usually be shipped as ORM-D (other regulated materials for domestic transport only) Consumer Commodity for transport within the United States. While this product is a hazardous material, it may be shipped in a limited quantity that presents a limited hazard during transportation, due to its form, quantity, and packaging. The information listed below is for shipping bulk material.

DOT

UN/ID no	UN1219
Proper shipping name	Isopropyl Alcohol Solution
Hazard class	3
Packing group	II
Special Provisions	IB2, T4, TP1
DOT Marine Pollutant	NP
Description	UN1219, Isopropyl Alcohol Solution, 3, II
Emergency Response Guide Number	129

IATA

UN number	UN1219
UN proper shipping name	Isopropyl alcohol solution
Transport hazard class(es)	3
Packing group	II
ERG Code	3L
Special Provisions	A180
Description	UN1219, Isopropyl alcohol solution, 3, II

IMDG

UN number	UN1219
UN proper shipping name	Isopropyl alcohol solution
Transport hazard class(es)	3
Packing group	II
EmS-No	F-E, S-D
Marine pollutant	NP
Description	UN1219, Isopropyl alcohol solution, 3, II, (19°C C.C.)

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Classification and labelling information included in section 2:
The following regulations have been used:
- Regulation EC No.1272/2008 and its modifications

Container information:
No data available.

Particular provisions:
No data available.

15.2. Chemical safety assessment

No data available.

SECTION 16: OTHER INFORMATION

NFPA	Health hazards 2	Flammability 3	Instability 0	Physical and chemical properties -
HMIS	Health hazards 2	Flammability 3	Physical hazards 0	Personal protection X

Key or legend to abbreviations and acronyms used in the safety data sheet:
Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.
The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.
It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.
The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.