



Safety Data Sheet (SDS)

Date Prepared/Revised: 5/21/20 Version no.: 01 Supersedes: (-)

1. Identification of the Mixture and of the Company

Product identifier: **Hand Sanitizer**

Product name:
5030 Hand Sanitizer

Relevant identified uses of the substance:

Uses advised against:

CAS No:	Not Applicable (mixture)
EC No:	Not Applicable (mixture)
Index No:	Not Applicable (mixture)
Manufacturer/Supplier:	Aervoe Industries Incorporated
Street address/P.O. Box:	1100 Mark Circle
Country ID/Postcode/Place:	Gardnerville, Nevada 89410
Telephone number:	1-775-782-0100
e-mail:	mailbox@aervoe.com
National contact:	Aervoe Industries Incorporated
For Product Information:	1-800-227-0196
Emergency telephone number:	1-800-424-9300 (CHEMTREC – 24 hrs)

2. Hazards identification

Classifications

Physical Hazards:	Flammable Liquid – 2
Health Hazards:	Eye Irritation – Category 2 Specific Target Organ Toxicity – Single Exposure (Narcotic Effects) – Category 3
Environmental Hazards:	N/AV

Labeling

Signal Word:	Danger
Hazard Statements:	H225 – Highly flammable liquid and vapour. H319 – Causes serious eye irritation. H336 – May cause drowsiness or dizziness. H411 – Toxic to aquatic life with long lasting effects.
Precautionary Statements:	P101 - If medical advice is needed, have product container or label at hand P102 - Keep out of reach of children P103 - Read label before use P264 – Wash with soap and water thoroughly after handling. P280 – Wear protective gloves/protective clothing/eye protection/face protection.



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P210 – Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P233 – Keep container tightly closed.
P240 – Ground/bond container and receiving equipment.
P241 – Use explosion-proof electrical/ventilating/lighting/.../equipment.
P242 – Use only non-sparking tools.
P243 – Take precautionary measures against static discharge.
P261 – Avoid breathing dust/fume/gas/mist/vapours/spray.
P271 – Use only outdoors or in a well-ventilated area.
P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P303 + P361 + P353 – IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin
P370 + P378 – In case of fire: Use DRY chemical, alcohol-resistant foam, water spray/fog or carbon dioxide for extinction.
P304 + P340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312 – Call a POISON CENTER or doctor/physician if you feel unwell.
P403 – Store in a well-ventilated place.
P405 – Store locked up.
P501 – Dispose of contents/container to disposal recycling center. Waste management should be in full compliance with federal, state, and local laws.



Symbols/Pictograms:

3. Composition / Information on Ingredients

Composition

CAS	Chemical Name	% by Weight
67-63-0	Isopropyl Alcohol	67.31-100%
56-81-5	Glycerol	12.33-18.5%
7722-84-1	Hydrogen Peroxide	0.43-0.45%

Other Product Information

Chemical Identity: Mixture

4.) First Aid Measures

Inhalation

Remove source of exposure or move person to fresh air and keep comfortable for breathing. Eliminate all ignition sources if safe to do so.



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Skin Contact

Rinse/wash with lukewarm, gently flowing water (and mild soap) for 15-20 minutes or until product is removed. If skin irritation occurs or you feel unwell: Get medical advice/attention.

Eye Contact

Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing. Take care not to rinse contaminated water into the unaffected eye or onto the face. Get immediate medical attention.

Ingestion

Immediately call 911 POISON CENTER/doctor/.Immediately transport to the nearest medical facility for treatment.Do NOT induce

vomiting. If vomiting occurs naturally, lie on your side, in the recovery position.

Most important symptoms and effects, both acute and delayed

No data available.

Indication of any immediate medical attention and special treatment needed

No data available.

5. Fire Fighting Measures

Suitable Extinguishing Media

Dry chemical, foam, carbon dioxide or fog is recommended. Water spray is recommended to cool or protect exposed materials or structures. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam. Sand or earth may be used for small fires only.

Unsuitable Extinguishing Media

No data available.

Specific Hazards in Case of Fire

Containers exposed to intense heat from fires should be cooled with large quantities of water. The vapour is heavier than air, spreads along the ground and distant ignition is possible.

Fire-fighting Procedures

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray may be useful in minimizing or dispersing vapors and to protect personnel.

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Special Protective Actions

Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.

6. Accidental Release Measures

Emergency Procedure



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ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Do not touch or walk through spilled material.

Isolate hazard area and keep unnecessary people away. Remove all possible sources of ignition in the surrounding area. Notify

authorities if any exposure to the general public or the environment occurs or is likely to occur.

If spilled material is cleaned up using a regulated solvent, the resulting waste mixture may be regulated.

Recommended Equipment

Positive pressure, full-facepiece self-contained breathing apparatus (SCBA), or positive pressure supplied air respirator with escape

SCBA (NIOSH approved).

Personal Precautions

Avoid breathing vapor. Avoid contact with skin, eye or clothing. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in

immediate area). Use explosive proof equipment. Avoid inhalation of dust and contact with skin and eyes. Do not touch damaged

containers or spilled materials unless wearing appropriate protective clothing.

Environmental Precautions

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage

systems and natural waterways by using sand, earth, or other appropriate barriers.

Methods and Materials for Containment and Cleaning up

Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with an appropriate

absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.

For large liquid spills (≥ 1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal.

For small liquid spills (< 1 drum), transfer by mechanical means to a labeled, sealable container for product recovery or safe disposal.

7. Handling and Storage

General

Wash hands after use.

Do not get in eyes, on skin or on clothing.

Do not breathe vapors or mists.

Use good personal hygiene practices.

Eating, drinking and smoking in work areas is prohibited.

Remove contaminated clothing and protective equipment before entering eating areas.

Eyewash stations and showers should be available in areas where this material is used and stored.

Ventilation Requirements

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to

control emissions near the source.

Storage Room Requirements

Keep container(s) tightly closed and properly labeled. Store in cool, dry, well-ventilated areas away from heat, direct sunlight, strong



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oxidizers and any incompatibilities. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty container retain residue and may be dangerous. Use non-sparking ventilation systems, approved explosion-proof equipment and intrinsically safe electrical systems in areas where this product is used and stored. Ground and bond containers and receiving equipment. Avoid static electricity by grounding.

8. Exposure Controls / Personal Protection

Eye Protection

Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids. If additional protection is needed for entire face, use in combination with a face shield.

Skin Protection

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber is recommended to avoid skin sensitization. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Launder soiled clothes or properly disposed of contaminated material, which cannot be decontaminated.

Respiratory Protection

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed. Check with respiratory protective equipment suppliers.

Appropriate Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Chemical Name	OSHA TWA (ppm)	OSHA TWA (mg/m3)	OSHA STEL (ppm)	OSHA STEL (mg/m3)	OSHA Tables (Z1, Z2, Z3)	OSHA Carcinogen	OSHA Skin designation	NIOSH TWA (ppm)
GLYCEROL		[15]; [5 (a)];			1			
HYDROGEN	1	1.4			1			1



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PEROXIDE								
ISOPROPYL ALCOHOL	400	980			1			400

Chemical Name	NIOSH TWA (mg/m3)	NIOSH STEL (ppm)	NIOSH STEL (mg/m3)	NIOSH Carcinogen	ACGIH TWA (ppm)	ACGIH TWA (mg/m3)	ACGIH STEL (ppm)	ACGIH STEL (mg/m3)
GLYCEROL								
HYDROGEN PEROXIDE	1.4				1			
ISOPROPYL ALCOHOL	980	500	1225		200		400	

Chemical Name	ACGIH Carcinogen	ACGIH Notations	ACGIH TLV Basis
GLYCEROL			
HYDROGEN PEROXIDE	A3	A3	Eye, URT & skin irr
ISOPROPYL ALCOHOL	A4	A4;BEI	Eye &URT irr; CNS Impair

9. Information on Basic Physical and Chemical Properties

Physical and Chemical Properties

Appearance	Clear liquid (gel)
Odor Threshold	N/A
Odor Description	Fresh
pH	6.5 to 7.5
Water Solubility	N/A
Flammability	Flash point below 73°F/23°C
Flash Point Symbol	C
Flash Point	13.8 °C
Viscosity	N/A
Lower Explosion Level	N/A
Upper Explosion Level	N/A
Vapor Pressure	N/A
Vapor Density	N/A
Freezing Point	N/A
Melting Point	N/A
Low Boiling Point	N/A
High Boiling Point	N/A
Auto Ignition Temp	N/A
Decomposition Pt	N/A
Evaporation Rate	N/A
Coefficient Water/Oil	N/A



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VOC Composite Partial Pressure	30.9376 mmHg
Specific Gravity	0.82
Density	6.82 lb/gal
% VOC	84.14%
Density VOC	5.74 lb/gal
% Solids By Weight	0.44%

10. Stability & Reactivity

Stability

Stable under normal conditions of use.

Conditions to Avoid

Avoid heat, sparks, open flames and other ignition sources.

Hazardous Reactions/Polymerization

No data available.

Incompatible Materials

Strong oxidizing agents.

Hazardous Decomposition Products

Thermal decomposition may yield carbon dioxide and/or carbon monoxide.

11. Toxicological Information

Likely route of exposure

Inhalation, ingestion, skin absorption

Acute toxicity

67-63-0 ISOPROPYL ALCOHOL

If ingested causes drunkenness and vomiting. Inhalation can irritate the nose and throat.

LC50 (Rat, Inhalation) = 16,000 ppm/8H Reference : Registry of Toxic Effects of Chemical Substances If ingested causes drunkenness

and vomiting. Inhalation can irritate the nose and throat.

LC50 (Rat, Inhalation) = 16,000 ppm/8H Reference : Registry of Toxic Effects of Chemical Substances If ingested causes drunkenness

and vomiting. Inhalation can irritate the nose and throat.

Skin Corrosion/Irritation

67-63-0 ISOPROPYL ALCOHOL

Contact can irritate and burn the skin. Prolonged or repeated contact can cause a skin rash, itching, dryness and redness.

7722-84-1 HYDROGEN PEROXIDE

Corrosive to the skin.

Serious eye damage/irritation

Causes serious eye irritation

67-63-0 ISOPROPYL ALCOHOL

Liquid irritates eyes and may cause injury.

7722-84-1 HYDROGEN PEROXIDE

Corrosive to the eye.

Germ cell mutagenicity

No data available.



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Carcinogenicity

No data available.

Respiratory/Skin Sensitization

Slightly irritating to respiratory system.

No data available.

Reproductive toxicity

No data available.

Specific Target Organ Toxicity - Repeated Exposure

67-63-0 ISOPROPYL ALCOHOL

Repeated high exposure can cause headache, dizziness, confusion, loss of coordination, unconsciousness and even death.

Aspiration hazard

No data available.

Specific Target Organ Toxicity - Single Exposure

May cause drowsiness or dizziness

67-63-0 ISOPROPYL ALCOHOL

Vapors cause mild irritation of upper respiratory tract; high concentrations may be anesthetic.

7722-84-1 HYDROGEN PEROXIDE

The vapour is irritating to the respiratory tract.

Likely Routes of Exposure

Inhalation, Ingestion, Skin contact, Eye contact

67-63-0 ISOPROPYL ALCOHOL

The substance can be absorbed into the body by inhalation of its vapour.

7722-84-1 HYDROGEN PEROXIDE

The substance can be absorbed into the body by inhalation of its vapour and by ingestion.

Potential Health Effects - Miscellaneous

67-63-0 ISOPROPYL ALCOHOL

The following medical conditions may be aggravated by exposure: dermatitis, respiratory disease. Developmental toxicity was seen in rat's offspring at doses that were maternally toxic.

Contact will cause moderate to severe redness and swelling, itching, tingling sensation, painful burning. May cause injury to the cornea of the eyes. Prolonged or repeated exposure may cause damage to any of the following organs/systems: liver. Ingestion studies on laboratory animals showed that very high oral doses caused increased liver and kidney weights.

Miscellaneous Health Effects

7722-84-1 HYDROGEN PEROXIDE

Ingestion of this substance may produce oxygen bubbles (embolism) in the blood, resulting in shock.

67-63-0 ISOPROPYL ALCOHOL

LC50 (rat): 17000 ppm (4-hour exposure); cited as 12000 ppm (8-hour exposure) (18)

LD50 (oral, male rat): 4710 mg/kg (cited as 6.0 mL/kg) (19)

LD50 (oral, mouse): 3600 mg/kg (20, unconfirmed)

LD50 (dermal, rabbit): 12870 mg/kg (cited as 16.4 mL/kg) (14)

7722-84-1 HYDROGEN PEROXIDE

LC50 (rat): 2000 mg/m³ (4-hour exposure; whole body exposure) (concentration not specified) (3) NOTE: This value is not considered reliable

since a whole body exposure was used and the study was poorly reported.

LD50 (oral, male rat): 1193 mg/kg (35% solution) (4, unconfirmed)



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LD50 (oral, female rat): 801 mg/kg (60% solution) (4, unconfirmed)
LD50 (oral, male rat): 75 mg/kg (70% solution) (4, unconfirmed)
LD50 (oral, mouse): 2000 mg/kg (90% solution) (4,12, unconfirmed)
LD50 (dermal, rabbit): approximately 690 mg/kg (90% solution) (4, unconfirmed)
LD50 (oral, male rat): 1517 mg/kg (9.6% solution) (4,12)

12. Ecological Information

Toxicity

No data available.

Mobility in Soil

If product enters soil, it will be mobile and may contaminate groundwater.

Dissolves in water.

No data available.

Bio-accumulative Potential

56-81-5 GLYCEROL

No potential for bioaccumulation.

67-63-0 ISOPROPYL ALCOHOL

Substance is not expected to bioaccumulate.

7722-84-1 HYDROGEN PEROXIDE

No potential for bioaccumulation.

Persistence and Degradability

56-81-5 GLYCEROL

Readily biodegradable.

67-63-0 ISOPROPYL ALCOHOL

Readily biodegradable

7722-84-1 HYDROGEN PEROXIDE

Readily biodegradable.

Other adverse effects

None known.

No data available.

Results of the PBT and vPvB assessment

56-81-5 GLYCEROL

The substance is not PBT/vPvB.

67-63-0 ISOPROPYL ALCOHOL

Substance is readily biodegradable and therefore not considered to be persistent. It is not expected to bioaccumulate as it has a Log Kow

< 4.5 and aquatic acute toxicity greatly exceeds the screening criteria of EC50 < 0.1 mg/l.

0007722-84-1 HYDROGEN PEROXIDE

The substance is not PBT/vPvB.

13. Disposal Considerations

Waste Disposal Method

Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria

for hazardous waste. Waste management should be in full compliance with federal, state and local laws.



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Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

14. Transportation Information

US DOT

UN Number	Proper Shipping Name	Hazard Class	Packing Group	Marine Pollutant	Special Provisions
UN1219	Isopropanol Solution	3	PGII	Not Applicable	Reference 49 CFR 172.101

IMDG

UN Number	Proper Shipping Name	Hazard Class	Packing Group	Marine Pollutant	Special Provisions
UN1219	Isopropanol Solution	3	PGII	Not Applicable	Reference IMDG code part 3

IATA:

UN Number	Proper Shipping Name	Hazard Class	Packing Group	Marine Pollutant	Special Provisions
UN1219	Isopropanol Solution	3	PGII	Not Applicable	Reference IATA Dangerous Goods Regulation

15. Regulatory Information

CAS	Chemical Name	% By Weight	Regulation List
67-63-0	ISOPROPYL ALCOHOL	67.310% - 100.000%	SARA313, SARA312,IARCCarcinogen,TSCA,OSHA
56-81-5	GLYCEROL	12.330% - 18.500%	SARA312,TSCA,OSHA
7722-84-1	HYDROGEN PEROXIDE	0.430% - 0.450%	SARA312,IARCCarcinogen,TSCA,OSHA

16. Other Information

This SDS has been completed in accordance with GHS Rev04 (2011): U.S OSHA, CMA, ANSI, Canadian WHMIS standards, and European Directives.

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To the best of our knowledge, the information contained herein is believed to be accurate. However, the above data does not imply any guarantee or warranty of any kind, expressed or implied. The final determination of the suitability of any material is the sole responsibility of the user. All materials made present un-known hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee these are the only hazards existing.