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1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name 447AC 62% Alcohol Foaming Hand Sanitizer

Other means of identification

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Hand sanitizer

Uses advised against Use only as directed.

Details of the supplier of the safety data sheet

Supplier NameVi-Jon Inc.Supplier AddressVi-Jon Inc.

8800 Page Avenue

Saint Louis MO 63114 US

Supplier Phone Number Phone: 314-427-1000 (M-F 8am-4pm CST)

Fax:3144271010

Supplier Email info@vijon.com

Emergency telephone number Chemtrec: 1-800-424-9300 (24-Hour)



2. HAZARDS IDENTIFICATION

Classification

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

Flammable liquids Category 2

GHS Label elements, including precautionary statements

Emergency Overview

Signal word: Danger

Highly flammable liquid and vapor



Appearance: Clear to Slightly Hazy, Physical state: Water-Thin Liquid Odor: Alcohol

Colorless, Water-Thin Liquid

Precautionary Statements - Prevention

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Use explosion-proof electrical/ ventilating/ lighting/ equipment

Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Skin

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

Fire

In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Unknown Toxicity

1.8 % of the mixture consists of ingredient(s) of unknown toxicity

Other information

May be harmful in contact with skin

Toxic to aquatic life

PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION

May cause slight eye irritation

Interactions with Other Chemicals

None known.



3. COMPOSITION/INFORMATION ON INGREDIENTS				
Chemical name	CAS No	Weight-%	Trade Secret	
Ethyl Alcohol 62% v/v	64-17-5	50 - 100	*	
Water	7732-18-5	10 - 50	*	
PEG-8 Dimethicone	68934-54-2	0 - 10	*	
Meadowfoamamidopropyl Betaine	Proprietary	0 - 10	*	
Glycerin	56-81-5	0 - 10	*	
Tocopheryl Acetate	7695-91-2	0 - 10	*	
Isopropyl Myristate	110-27-0	0 - 10	*	

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret

4. FIRST AID MEASURES

First aid measures

Eye contact 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.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes.

Inhalation Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult,

(trained personnel should) give oxygen.

Ingestion Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an

unconscious person.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and No information available.

Effects

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water spray, fog or alcohol-resistant foam. Use water spray or fog; do not use straight streams.

Unsuitable extinguishing media

CAUTION: All these products have a very low flash point: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

Vapors can form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapor explosion hazard indoors, outdoors or in sewers. Runoff to sewer may create fire or explosion hazard.

Uniform Fire Code Flammable Liquid: I-B

Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge Yes.

Protective equipment and precautions for firefighters

Move containers from fire area if you can do it without risk.



6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

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

All equipment used when handling the product must be grounded. Do not touch or walk

through spilled material. Stop leak if you can do it without risk.

Other Information Water spray may reduce vapor; but may not prevent ignition in closed spaces.

Environmental precautions

Environmental precautions Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment A vapor suppressing foam may be used to reduce vapors. Absorb or cover with dry earth,

sand or other non-combustible material and transfer to containers.

Methods for cleaning up

Use clean non-sparking tools to collect absorbed material. Dike far ahead of liquid spill for

later disposal. Soak up with inert absorbent material. Pick up and transfer to properly

labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Use personal

protection equipment. Avoid contact with skin and eyes. Avoid breathing vapors or mists. Keep away from heat/sparks/open flames/hot surfaces. - 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.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from

heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national

regulations. Store in accordance with local regulations.

Incompatible Products None known based on information supplied.



8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines There is no exposure data pertaining to the Product. This section reflects exposure data

pertaining to individual ingredients.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethyl Alcohol 62% v/v	STEL: 1000 ppm	TWA: 1000 ppm	IDLH: 3300 ppm 10% LEL
64-17-5		TWA: 1900 mg/m ³	TWA: 1000 ppm
		(vacated) TWA: 1000 ppm	TWA: 1900 mg/m ³
		(vacated) TWA: 1900 mg/m ³	
Glycerin	TWA: 10 mg/m ³ mist	TWA: 15 mg/m ³ mist, total particulate	
56-81-5		TWA: 5 mg/m ³ mist, respirable	
		fraction	
		(vacated) TWA: 10 mg/m ³ mist, total	
		particulate	
		(vacated) TWA: 5 mg/m ³ mist,	
		respirable fraction	

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits NIOSH IDLH Immediately Dangerous to Life or Health

Other Exposure Guidelines Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d

962 (11th Cir., 1992) See section 15 for national exposure control parameters

Appropriate engineering controls

Engineering Measures Showers

> Eyewash stations Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles.

Skin and body protection Wear protective gloves and protective clothing. Long sleeved clothing. Chemical resistant

apron. Impervious gloves. Antistatic boots.

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved Respiratory protection

> respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or

smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended.

Wash hands before breaks and immediately after handling the product.



9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical state Water-Thin Liquid

Appearance Clear to Slightly Hazy, Colorless, Odor Alcohol

Water-Thin Liquid

Color Colorless Odor Threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks Method</u>

UNKNOWN None known Melting / freezing point No data available None known Boiling point / boiling range No data available None known **Flash Point** 22 C / 72 F None known **Evaporation Rate** No data available None known Flammability (solid, gas) No data available None known

Flammability Limit in Air

Upper flammability limitNo data availableLower flammability limitNo data available

Vapor pressureNo data availableNone knownVapor densityNo data availableNone knownSpecific Gravity0.899None known

Water SolubilityMiscible in waterNone knownSolubility in other solventsNo data availableNone knownPartition coefficient: n-octanol/water0None known

Autoignition temperatureNo data availableNone knownDecomposition temperatureNo data availableNone knownKinematic viscosityNo data availableNone knownDynamic viscosityNo data availableNone known

Explosive propertiesNo data available **Oxidizing properties**No data available

Other Information

Softening Point

VOC Content (%)

Particle Size

Particle Size Distribution

No data available

No data available

No data available

10. STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to avoid

Heat, flames, and sparks.

Incompatible materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

When used in accordance with the directions.



11. TOXICOLOGICAL INFORMATION

There is no data for this product. The information included in this section describes the potential hazards of the individual ingredients.

Information on likely routes of exposure

Product Information

InhalationSpecific test data for the substance or mixture is not available.Eye contactSpecific test data for the substance or mixture is not available.Skin contactSpecific test data for the substance or mixture is not available.IngestionSpecific test data for the substance or mixture is not available.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Ethyl Alcohol 62% v/v 64-17-5	= 7060 mg/kg (Rat)	-	= 124.7 mg/L (Rat) 4 h
Water 7732-18-5	> 90 mL/kg (Rat)	-	-
Glycerin 56-81-5	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 570 mg/m ³ (Rat) 1 h
Isopropyl Myristate 110-27-0	> 10000 mg/kg (Rat)	= 5 g/kg (Rabbit)	> 41 mg/L (Rat) 1 h

Information on toxicological effects

Symptoms No information available.

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

SensitizationNo information available.Mutagenic EffectsNo information available.

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

Ethanol has been shown to be carcinogenic in long-term studies **ONLY** when consumed as

alcoholic beverage.

Chemical name	ACGIH	IARC	NTP	OSHA
Ethyl Alcohol	A3	Group 1	Known	X
64-17-5				

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans NTP (National Toxicology Program)

Known - Known Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity

No information available.

STOT - single exposure

No information available.

STOT - repeated exposure

No information available.

Chronic ToxicityNo known effect based on information supplied. Carcinogenic potential is unknown.Target Organ EffectsBlood. Central Nervous System (CNS). Eyes. Liver. Reproductive System. Respiratory

system. Skin.

Aspiration Hazard No information available.

Numerical measures of toxicity Product Information

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

ATEmix (oral) 12,948.00 mg/kg

ATEmix (inhalation-dust/mist)

228.70 mg/l



12. ECOLOGICAL INFORMATION

There is no ecological data on the Product. The Product ingredients are expected to be safe for the environment at concentrations predicted under normal use and accidental spill scenarios. Packaging components are compatible with the conventional solid waste management practices.

Ecotoxicity

Toxic to aquatic organisms.

Persistence and Degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal methods This material, as supplied, is a hazardous waste according to federal regulations (40 CFR

261).

Contaminated Packaging Dispose of contents/containers in accordance with local regulations.

US EPA Waste Number D001
California Hazardous Waste Codes 311

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

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name CONSUMER COMMODITY

Hazard Class ORM-D

Description CONSUMER COMMODITY, ORM-D

Emergency Response Guide 127

Number

<u>TDG</u>

<u>U</u>N-No. UN1170

Proper Shipping Name ETHANOL SOLUTION

Hazard Class 3
Packing Group ||

Description UN1170, ETHANOL SOLUTION, 3, II

MEX

UN-No. UN1170

Proper Shipping Name ETHANOL SOLUTION

Hazard Class 3
Packing Group ||

Description UN1170, ETHANOL SOLUTION, 3, II

ICAO

UN-No. UN1170

Proper Shipping Name ETHANOL SOLUTION

Hazard Class 3
Packing Group ||

Description UN1170, ETHANOL SOLUTION, 3, II



IATA

UN-No. UN1170

Proper Shipping Name ETHANOL SOLUTION

Hazard Class 3
Packing Group II
ERG Code 3L

Description UN1170, ETHANOL SOLUTION, 3, II

IMDG/IMO

UN-No. UN1170

Proper Shipping Name ETHANOL SOLUTION

Hazard Class 3
Packing Group II
EmS-No. F-E, S-D

Description UN1170, ETHANOL SOLUTION, 3, II, (22°C C.C.)

RID

UN-No. UN1170

Proper Shipping Name ETHANOL SOLUTION

Hazard Class 3
Packing Group || Classification code F1

Description UN1170, ETHANOL SOLUTION, 3, II

<u>ADR</u>

UN-No. UN1170

Proper Shipping Name ETHANOL SOLUTION

Hazard Class 3
Packing Group II
Classification code F1
Tunnel restriction code (D/E)

Description UN1170, ETHANOL SOLUTION, 3, II, (D/E)

<u>ADN</u>

UN-No. UN1170

Proper Shipping Name ETHANOL SOLUTION

Hazard Class 3
Packing Group II
Classification code F1
Special Provisions 144, 601

Description UN1170, ETHANOL SOLUTION, 3, II

Hazard Labels 3
Limited Quantity 1 L
Ventilation VE01



15. REGULATORY INFORMATION

International Inventories

TSCA Not determined DSL Not determined IECSC Not determined

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health HazardNoChronic Health HazardNoFire HazardYesSudden release of pressure hazardNoReactive HazardNo

CWA (Clean Water Act)

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

CERCLA

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

US State Regulations

California Proposition 65 - NONE

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Ethyl Alcohol 62% v/v 64-17-5	Х	Х	Х		Х
Glycerin 56-81-5	Х	X	Х	Х	

International Regulations

Mexico

National occupational exposure limits

Chemical name	Carcinogen Status	Exposure Limits
Ethyl Alcohol 62% v/v		Mexico: TWA 1000 ppm
		Mexico: TWA 1900 mg/m ³
Glycerin	-	10mg/m³ (mist) TWA

Mexico - Occupational Exposure Limits - Carcinogens

Canada

WHMIS Hazard Class

Not determined



16. OTHER INFORMATION

NFPA Health Hazards 1 Flammability 3 Instability 0 Physical and

Chemical Hazards

N/A

HMIS Health Hazards 1 Flammability 3 Physical Hazard 0 Personal Protection

Χ

Prepared By Product Stewardship

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Revision Note None

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Approved and Updated by Vi-Jon, Inc.

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End of Safety Data Sheet

