

Product Number: 370AB
Issuing Date: September 4, 2014

Revision Date: None

Product Name: Advanced Hand Sanitizer
Revision Number: 0



VI-JON[®] Safety Data Sheet

for Health and Beauty Products

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

Product identifier

Product Name: Advanced Hand Sanitizer

Item Number: 370AB

Other means of identification

Synonyms: None

Recommended use of the chemical and restrictions on use

Recommended Use: Hand Sanitizer

Uses advised against: No information available

Details of the supplier of the safety data sheet

Supplier Address

Vi-Jon Inc.

8800 Page Avenue

Saint Louis

MO

63114

US

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

Fax: 314-427-1010

Emergency telephone number

Chemtrec: 1-800-424-9300 (24-Hour)

2. HAZARDS IDENTIFICATION FOR INDUSTRIAL SETTING

Classification

This product contains a chemical or chemicals considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122).

Flammable liquids	Category 3
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GHS Label elements, including precautionary statements

Emergency Overview

Signal word	Hazard Statements	Danger
	Flammable liquid and vapor 	
Appearance Clear to slightly hazy, Colorless, Viscous liquid	Physical State Viscous liquid	Odor Alcohol, Sweet, Light floral

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
Use only non-sparking tools
Take precautionary measures against static discharge
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Specific treatment (see supplemental first aid instructions on this label)

Eyes

IF IN EYES: 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/attention

Fire

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

Inhalation

IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

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

1.271% of the mixture consists of ingredient(s) of unknown toxicity

Other information

Prolonged or repeated contact may dry skin and cause irritation

Interactions with Other Chemicals No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %	Trade Secret
Ethyl Alcohol 70% v/v	64-17-5	50-100	*
Water	7732-18-5	10-50	*
Glycerides Caprylate/Caprata	91744-32-0	0-10	*
Glycerin	56-81-5	0-10	*
Isopropyl Myristate	110-27-0	0-10	*
Tocopherol Acetate	10191-41-0	0-10	*
Acrylates/C10-30 Alkyl Acrylate Crosspolymer	N/A	0-10	*
Fragrance	Fragrance	0-10	*
Benzophenone-4	4065-45-6	0-10	*

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

4. FIRST AID MEASURES

First aid measures

General Advice

Show this safety data sheet to the doctor in attendance.

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Remove contact lenses, if applicable, and continue flushing. Do not rub affected area. If symptoms persist, call a physician.

Skin Contact

In the case of skin irritation or allergic reactions see a physician.

Inhalation

Move to fresh air. Get medical attention immediately if symptoms occur. May cause allergic respiratory reaction. If breathing has stopped, contact emergency medical services immediately and give artificial respiration.

Ingestion

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

Most important symptoms and effects, both acute and delayed

Most Important Symptoms/Effects

Burning sensation. Itching. Rashes. Hives. Coughing and/ or wheezing. May cause breathing difficulties if inhaled.

Indication of any immediate medical attention and special treatment needed

Notes to Physician

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry chemical. Carbon dioxide (CO₂). Water spray. Alcohol resistant foam.

Unsuitable Extinguishing Media

CAUTION: Use of water spray when fighting fire may be inefficient.

Specific Hazards Arising from the Chemical

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.

Uniform Fire Code

Flammable Liquid: I-C

Hazardous Combustion Products

Carbon oxides.

Explosion Data

Sensitivity to Mechanical Impact

No

Sensitivity to Static Discharge

Yes

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES FOR INDUSTRIAL SETTING

Personal precautions, protective equipment and emergency procedures

Personal Precautions Avoid contact with eyes and clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. See section 8 for more information. 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 Refer to protective measures listed in Sections 7 and 8. Ventilate the area.

Environmental precautions

Environmental Precautions Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so. 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.

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.

7. HANDLING AND STORAGE FOR INDUSTRIAL SETTING

Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact eyes and clothing. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. 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 FOR INDUSTRIAL SETTING

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 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m ³ (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m ³	IDLH: 3300 ppm 10% LEL TWA: 1000 ppm TWA: 1900 mg/m ³
Glycerin 56-81-5	TWA: 10 mg/m ³ mist	TWA: 15 mg/m ³ mist, total particulate 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/clothing. Long sleeved clothing. Impervious gloves.
 Respiratory Protection No protective equipment is needed under normal use conditions. If irritation is experienced, ventilation and evacuation may be required.
 Hygiene Measures Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Avoid contact with eyes and clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Viscous liquid		
Appearance	Clear to slightly hazy, Colorless, Viscous liquid	Odor	Alcohol, Sweet, Light floral
Color	No information available	Odor Threshold	No information available
<u>Property</u>	<u>Values</u>	<u>Remarks/ Method</u>	
pH	7.1	None known	
Melting/freezing point	No data available	None known	
Boiling Point/Range	No data available	None known	
Flash Point	23 C / 73 F	None known	
Evaporation rate	No data available	None known	
Flammability (solid, gas)	No data available	None known	
Flammability Limits in Air			
Upper flammability limit	No data available		
Lower flammability limit	No data available		
Vapor pressure	No data available	None known	
Vapor density	No data available	None known	
Specific Gravity	0.88	None known	
Water Solubility	Miscible with water	None known	
Solubility in other solvents	No data available	None known	
Partition coefficient: n-octanol/water	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	
Explosive Properties	No data available		
Oxidizing Properties	No data available		
<u>Other Information</u>			
Softening Point	No data available		
VOC Content (%)	No data available		
Particle Size	No data available		
Particle Size Distribution	No data available		

10. STABILITY AND REACTIVITY FOR INDUSTRIAL SETTING

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

Carbon oxides.

When used in accordance with the directions.

11. TOXICOLOGICAL INFORMATION FOR INDUSTRIAL SETTING

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

Inhalation	May cause irritation of respiratory tract.
Eye Contact	Irritating to eyes. May cause redness, itching, and pain.
Skin Contact	Prolonged contact may cause redness and irritation.
Ingestion	Ingestion may cause irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Component Information

No information available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Ethyl Alcohol 64-17-5	-	-	= 124.7 mg/L (Rat) 4 h
Glycerin 56-81-5	-	> 10 g/kg (Rabbit)	-

Information on toxicological effects

Symptoms

Redness of the skin. May cause redness and tearing of the eyes. Itching. Rashes. Hives. Coughing and/ or wheezing. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing.

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

Sensitization	No information available.
Mutagenic Effects	No information available.
Carcinogenicity	N/A
Reproductive Toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Chronic Toxicity	No information available.
Target Organ Effects	Eyes. 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 (inhalation-dust/mist)
196.90 mg/l

12. ECOLOGICAL INFORMATION FOR INDUSTRIAL SETTING

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 No information available.
Persistence and Degradability No information available.
Bioaccumulation No information available.
Other Adverse Effects No information available.

13. DISPOSAL CONSIDERATIONS FOR INDUSTRIAL SETTING

Waste treatment methods

Waste Disposal Methods This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated Packaging Dispose of in accordance with local regulations.

California Hazardous Waste Codes 331

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

Chemical Name	California Hazardous Waste
Ethyl Alcohol 64-17-5	Toxic Ignitable

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14. TRANSPORT INFORMATION

DOT
Proper Shipping Name CONSUMER COMMODITY
Hazard Class ORM-D
Description CONSUMER COMMODITY, ORM-D
Emergency Response Guide Number 127

TDG
UN-No. UN1170
Proper Shipping Name ETHANOL
Hazard Class 3
Packing Group III
Description UN1170, ETHANOL, 3, III

MEX
UN-No. UN1170
Proper Shipping Name ETHANOL
Hazard Class 3
Packing Group III
Description UN1170, ETHANOL, 3, III

ICAO
UN-No. UN1170
Proper Shipping Name ETHANOL
Hazard Class 3
Packing Group III
Description UN1170, ETHANOL, 3, III

IATA
UN-No. UN1170
Proper Shipping Name ETHANOL
Hazard Class 3
Packing Group III
Description UN1170, ETHANOL, 3, III

IMDG/IMO
UN-No. UN1170
Proper Shipping Name ETHANOL
Hazard Class 3
Packing Group III
EmS No. F-E, S-D
Description UN1170, ETHANOL, 3, III, (23°C C.C.)

RID
UN-No. UN1170
Proper Shipping Name ETHANOL SOLUTION
Hazard Class 3
Packing Group III
Classification code F1
Description UN1170, ETHANOL SOLUTION, 3, III

ADR
UN-No. UN1170
Proper Shipping Name ETHANOL SOLUTION
Hazard Class 3
Packing Group III
Classification code F1
Tunnel restriction code (D/E)
Description UN1170, ETHANOL SOLUTION, 3, III

ADN
UN-No. UN1170
Proper Shipping Name ETHANOL SOLUTION
Hazard Class 3
Packing Group III
Classification code F1
Special Provisions 144, 601
Description UN1170, ETHANOL SOLUTION, 3, III
Limited Quantity 5 L
Ventilation VE01

15. REGULATORY INFORMATION FOR INDUSTRIAL SETTING

International Inventories

TSCA Exempt
 DSL All components are listed either on the DSL or NDSL.

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

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any 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 Hazard	No
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act (CWA)

This product does not contain any substances regulated as pollutants pursuant to the CWA (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.

U.S. 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 64-17-5		X			
Glycerin 56-81-5	X	X	X	X	

International Regulations

Mexico

National occupational exposure limits

Component	Carcinogen Status	Exposure Limits
Ethyl Alcohol 64-17-5 (30 - 60)		Mexico: TWA 1000 ppm Mexico: TWA 1900 mg/m ³
Glycerin 56-81-5 (1 - 5)	-	10mg/m ³ (mist) TWA

Canada

WHMIS Hazard Class

B2



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16. OTHER INFORMATION

<u>NFPA</u>	Health Hazard 1	Flammability 3	Instability 0	Physical and Chemical Hazards - None
<u>HMIS</u>	Health Hazard 1	Flammability 3	Physical Hazard 0	Personal Protection X

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General Disclaimer

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 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.

Approved and Updated by Vi-Jon, Inc.

Disclaimer:

The information and recommendations contained in the Safety Data Sheet (SDS) are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. The information and recommendations set forth herein are presented in good faith and believed to be correct as of this date hereof.

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End of Safety Data Sheet