

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 12/07/2017

Reviewed on 12/07/2017

1 Identification

- **Product Identifier**
- **Trade name: Isopropyl Alcohol, 70%**
- **Product Number: E0369-55**
- **Relevant identified uses of the substance or mixture and uses advised against: Solvent**
- **Product Description Isopropyl Alcohol, 70%**
- **Application of the substance / the mixture: Solvent**
- **Details of the Supplier of the Safety Data Sheet:**
- **Manufacturer/Supplier:**
 Ecolink
 2177A Flintstone Drive
 Tucker, GA 30084
 www.ecolink.com
 800-886-8240 or 770-621-8240 (8-5 EST)
 email: info@ecolink.com
- **Emergency telephone number:**
 Inside the U.S.: 800-535-5053 (INFOTRAC, 24 HOURS)
 Outside the U.S.: 352-323-3500 (INFOTRAC, 24 HOURS)

2 Hazard(s) Identification

- **Classification of the substance or mixture:**



GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.



GHS07

Eye Irrit. 2A H319 Causes serious eye irritation.
 STOT SE 3 H336 May cause drowsiness or dizziness.

- **Label elements:**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms:**



GHS02 GHS07

- **Signal word: Danger**

- **Hazard-determining components of labeling:**

Isopropyl alcohol

- **Hazard statements:**

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

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· Precautionary statements:

- P210 *Keep away from heat/sparks/open flames/hot surfaces. - No smoking.*
- 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/vapors/spray.*
- P264 *Wash thoroughly after handling.*
- P271 *Use only outdoors or in a well-ventilated area.*
- P280 *Wear protective gloves/protective clothing/eye protection/face protection.*
- P303+P361+P353 *If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.*
- 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.*
- P312 *Call a poison center/doctor if you feel unwell.*
- P337+P313 *If eye irritation persists: Get medical advice/attention.*
- P370+P378 *In case of fire: Use for extinction: CO2, powder or water spray.*
- P403+P233 *Store in a well-ventilated place. Keep container tightly closed.*
- P403+P235 *Store in a well-ventilated place. Keep cool.*
- P405 *Store locked up.*
- P501 *Dispose of contents/container in accordance with local/regional/national/international regulations.*

· Unknown acute toxicity:

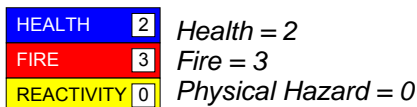
This value refers to knowledge of known, established toxicological or ecotoxicological values.

· Classification system: NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme

· NFPA ratings (scale 0 - 4)



· HMIS-ratings (scale 0 - 4)



· Hazard(s) not otherwise classified (HNOC): None known

3 Composition/Information on Ingredients

· Non-hazardous components:

7732-18-5 Water, distilled water, deionized water	30%
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· Chemical characterization: Mixtures

· Description: Mixture of substances listed below with non-hazardous additions.

· Dangerous Components:

CAS: 67-63-0 Isopropyl alcohol	70%
RTECS: NT 8050000 Flam. Liq. 2, H225; Eye Irrit. 2A, H319; STOT SE 3, H336	

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Trade name: Isopropyl Alcohol, 70%**Additional information:**

The exact percentages of the ingredients of this mixture are considered to be proprietary and are withheld in accordance with the provisions of paragraph (i) of §1910.1200 of 29 CFR 1910.1200 Trade Secrets.

4 First-Aid Measures

Description of first aid measures:**After inhalation:**

Supply fresh air. If required, provide artificial respiration. Consult doctor if symptoms persist. In case of unconsciousness place patient stably in side position for transportation.

After skin contact:

Wash with soap and water.
If skin irritation occurs, consult a doctor.

After eye contact:

Rinse opened eye for at least 15 minutes under running water. If symptoms persist, consult a doctor.

After swallowing:

Rinse out mouth and then drink plenty of water.
Do not induce vomiting.
If vomiting does occur, repeat fluid administration
If symptoms develop and/or persist, seek medical attention.

Information for doctor:**Most important symptoms and effects, both acute and delayed:**

No further relevant information available.

Indication of any immediate medical attention and special treatment needed:

No further relevant information available.

5 Fire-Fighting Measures

Extinguishing media:

Suitable extinguishing agents: Regular foam, water fog, carbon dioxide or dry chemical. Class B.

For safety reasons unsuitable extinguishing agents: Water with full jet

Special hazards arising from the substance or mixture:

If incinerated product will release the following toxic fumes: Carbon Oxides.

Advice for firefighters: Use water spray to cool unopened containers.

Protective equipment:

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation.
Keep people at a distance and stay upwind.
Avoid contact with skin, eyes and clothing.
Keep away from ignition sources
Wear protective equipment. Keep unprotected persons away.

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- **Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
Dispose of the collected material according to regulations.
- **Reference to other sections:**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

· **PAC-1:**

67-63-0	Isopropyl alcohol	400 ppm
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· **PAC-2:**

67-63-0	Isopropyl alcohol	2000* ppm
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· **PAC-3:**

67-63-0	Isopropyl alcohol	12000** ppm
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7 Handling and Storage

- **Handling**
- **Precautions for safe handling:**
Avoid contact with skin, eyes and clothing
Keep away from sources of ignition.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
Keep receptacles tightly sealed.
- **Information about protection against explosions and fires:**
Do not spray on a naked flame or any incandescent material.
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities:**
Store away from strong acids, strong bases, strong oxidizing agents and strong reducing agents.
- **Storage**
- **Requirements to be met by storerooms and receptacles:**
Store in a well ventilated place.
Store in a cool, dry place away from sparks and flame.
Do not store in direct sunlight.
Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
- **Specific end use(s):** No further relevant information available.

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8 Exposure Controls/Personal Protection

- **Additional information about design of technical systems:** No further data; see section 7.

- **Control parameters:**

All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94). Use mechanical (general) ventilation for storage areas. Use appropriate ventilation as required to keep Exposure Limits in Air below TLV & PEL limits.

- **Components with occupational exposure limits:**

67-63-0 Isopropyl alcohol

PEL	Long-term value: 980 mg/m ³ , 400 ppm
REL	Short-term value: 1225 mg/m ³ , 500 ppm Long-term value: 980 mg/m ³ , 400 ppm
TLV	Short-term value: 984 mg/m ³ , 400 ppm Long-term value: 492 mg/m ³ , 200 ppm BEI

- **Ingredients with biological limit values:**

67-63-0 Isopropyl alcohol

BEI	40 mg/L urine end of shift at end of workweek Acetone (background, nonspecific)
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- **Additional information:** The lists that were valid during the creation of this SDS were used as basis.

- **Exposure controls:**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing and wash before reuse.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

- **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure, use respiratory protective device that is independent of circulating air.

- **Protection of hands:**



Protective gloves

- **Material of gloves:**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

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- **Penetration time of glove material:**
The exact break-through time has to be determined and observed by the manufacturer of the protective gloves.

- **Eye protection:**



Safety glasses

- **Body protection:** Not required.

9 Physical and Chemical Properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form: Liquid
Color: Clear, colorless

- **Odor:** Alcohol-like
- **Odor threshold:** Not determined.

- **pH-value:** Not applicable.

- **Change in condition**

Melting point/Melting range: Not determined.
Boiling point/Boiling range: ≥83 °C (≥181.4 °F)

- **Flash point:** 18 °C (64.4 °F)

- **Flammability (solid, gaseous):** Not applicable.

- **Ignition temperature:** ≥456 °C (≥852.8 °F)

- **Decomposition temperature:** Not determined.

- **Auto igniting:** Product is not self-igniting.

- **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

- **Explosion limits:**

Lower: ≥2 Vol %
Upper: ≤12 Vol %

- **Vapor pressure @ 30 °C (86 °F):** ≤76 hPa (≤57 mm Hg)

- **Density @ 20 °C (68 °F):** 0.88 g/cm³ (7.344 lbs/gal)

- **Relative density:** Not determined.

- **Vapor density:** Not determined.

- **Evaporation rate:** Not determined.

- **Solubility in / Miscibility with:**

Water: Fully miscible.

- **Partition coefficient (n-octanol/water):** Not determined.

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- | | |
|-----------------------------|--|
| · Viscosity: | |
| Dynamic: | Not determined. |
| Kinematic: | Not determined. |
| · Solvent content: | |
| Organic solvents: | 70.0 % |
| Water: | 30.0 % |
| VOC content: | 70.00 % |
| Solids content: | 0.0 % |
| · Other information: | No further relevant information available. |

10 Stability and Reactivity

- **Reactivity:** No further relevant information available.
- **Chemical stability:** Stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:**
Heat, flame and ignition sources.
Elevated temperatures; decomposes with heat. Sources of ignition such as sparks, hot spots, welding, flames.
- **Incompatible materials:**
Strong acids, strong bases, strong oxidizing agents and strong reducing agents.
- **Hazardous decomposition products:** Carbon Oxides.

11 Toxicological Information

- **Information on toxicological effects:**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**

67-63-0 Isopropyl alcohol		
Oral	LD50	5,045 mg/kg (Rat)
Dermal	LD50	12,800 mg/kg (Rabbit)
Inhalative	LC50/4 h	30 mg/l (Rat)
	LC50/96 hours	9,640 mg/l (Pimephales)

- **Primary irritant effect:**
- **On the skin:** No irritating effect.
- **On the eye:** Irritating effect.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

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· **Carcinogenic categories:**

· **IARC (International Agency for Research on Cancer):**

67-63-0	Isopropyl alcohol	3
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· **NTP (National Toxicology Program):**

None of the ingredients are listed.

· **OSHA-Ca (Occupational Safety & Health Administration):**

None of the ingredients are listed.

12 Ecological Information

· **Toxicity:**

· **Aquatic toxicity:**

67-63-0 Isopropyl alcohol

EC50	6,851 mg/l (Green algae)
	5,102 mg/l (Water flea)

· **Persistence and degradability:** No further relevant information available.

· **Behavior in environmental systems:**

· **Bioaccumulative potential:** No further relevant information available.

· **Mobility in soil:** No further relevant information available.

· **Additional ecological information:**

· **General notes:**

Do not allow undiluted product or product that has not been neutralized to reach ground water, water course or sewage system.

· **Results of PBT and vPvB assessment:**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects:** No further relevant information available.

13 Disposal Considerations

· **Waste treatment methods:**

· **Recommendation:**

Observe all federal, state and local environmental regulations when disposing of this material. Isopropyl Alcohol, 70% liquid is to be disposed of according to local, state, and federal regulations. Please call us if you need additional disposal information.

· **Uncleaned packagings**

· **Recommendation:** Dispose of as unused product.

· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

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14 Transport Information

· UN-Number:	UN1219
· DOT, ADR/ADN, IMDG, IATA	
· UN proper shipping name:	Isopropanol
· DOT	UN1219 Isopropanol solution
· ADR/ADN	ISOPROPANOL (ISOPROPYL ALCOHOL) solution
· IMDG, IATA	
· Transport hazard class(es):	
· DOT	
	
· Class:	3 Flammable liquids
· Label:	3
· ADR/ADN	
	
· Class:	3 (F1) Flammable liquids
· Label:	3
· IMDG, IATA	
	
· Class:	3 Flammable liquids
· Label:	3
· Packing group:	II
· DOT, ADR/ADN, IMDG, IATA	
· Environmental hazards:	Not applicable.
· Special precautions for user:	Warning: Flammable liquids
· Danger code (Kemler):	33
· EMS Number:	F-E,S-D
· Stowage Category	B
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:	Not applicable.

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Trade name: Isopropyl Alcohol, 70%

· Transport/Additional information:

· DOT

· Quantity limitations: On passenger aircraft/rail: 5 L
On cargo aircraft only: 60 L

· ADR/ADN

· Excepted quantities (EQ): Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml

· IMDG

· Limited quantities (LQ): 1L
· Excepted quantities (EQ): Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml

· UN "Model Regulation": UN 1219 ISOPROPANOL SOLUTION, 3, II

15 Regulatory Information

· Safety, health and environmental regulations/legislation specific for the substance or mixture:

· SARA (Superfund Amendments and Reauthorization):

· Section 355 (extremely hazardous substances):

None of the ingredients are listed.

· Section 313 (Specific toxic chemical listings):

67-63-0 Isopropyl alcohol

· TSCA (Toxic Substances Control Act):

All ingredients are listed or exempt from listing.

· California Proposition 65:

· Chemicals known to cause cancer:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

· New Jersey Right-to-Know List:

67-63-0 Isopropyl alcohol

· New Jersey Special Hazardous Substance List:

67-63-0 Isopropyl alcohol F3

· Pennsylvania Right-to-Know List:

67-63-0 Isopropyl alcohol

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Trade name: Isopropyl Alcohol, 70%

· **Pennsylvania Special Hazardous Substance List:**

67-63-0 Isopropyl alcohol	E
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· **Carcinogenic categories:**

· **EPA (Environmental Protection Agency):**

None of the ingredients are listed.

· **TLV (Threshold Limit Value established by ACGIH):**

67-63-0 Isopropyl alcohol	A4
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· **NIOSH-Ca (National Institute for Occupational Safety and Health):**

None of the ingredients are listed.

· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms:**



GHS02 GHS07

· **Signal word: Danger**

· **Hazard-determining components of labeling:**

Isopropyl alcohol

· **Hazard statements:**

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

· **Precautionary statements:**

- P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- 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/vapors/spray.
- P264 Wash thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- 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.
- P312 Call a poison center/doctor if you feel unwell.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
- P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- P403+P235 Store in a well-ventilated place. Keep cool.
- P405 Store locked up.

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Trade name: Isopropyl Alcohol, 70%

P501 *Dispose of contents/container in accordance with local/regional/national/international regulations.*

· **National regulations:**

None of the ingredients are listed.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other Information

Ecolink, Inc. believes the information contained herein is accurate. However, Ecolink makes no warranty, expressed or implied, regarding the accuracy of this data or the results to be obtained by the use thereof. Ecolink, Inc. assumes no responsibility for injury from the use of the product described herein.

· **Date of preparation / last revision:** 12/07/2017 / -

· **Abbreviations and acronyms:**

- ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road
- ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
- IMDG: International Maritime Code for Dangerous Goods
- DOT: US Department of Transportation
- IATA: International Air Transport Association
- ACGIH: American Conference of Governmental Industrial Hygienists
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- NFPA: National Fire Protection Association (USA)
- HMS: Hazardous Materials Identification System (USA)
- VOC: Volatile Organic Compounds (USA, EU)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- NIOSH: National Institute for Occupational Safety and Health
- OSHA: Occupational Safety & Health Administration
- TLV: Threshold Limit Value
- PEL: Permissible Exposure Limit
- REL: Recommended Exposure Limit
- BEI: Biological Exposure Limit
- Flam. Liq. 2: Flammable liquids – Category 2
- Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
- STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

· *** Data compared to the previous version altered.**

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