

SAFETY DATA SHEET



Date issued : 08/03/2005

SDS number : 10669

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Revision number : 15

ISOPROPYL ALCOHOL 99%

1. Identification

Product identifier: ISOPROPYL ALCOHOL 99%

Product formulation name: ISOPROPANOL | ISOPROPYL ALCOHOL

Alternate product identifier(s): IPA, ISOPROPANOL, 2-PROPANOL, IPA USP/NF Grade, SEMI GRADE, SOLOX

Manufacturer / Supplier

Distributed by Tarr, LLC

P.O. Box 12570

Portland, OR 97212

Customer Service: 503-288-5294

Emergency telephone number (24 hour)

CHEMTREC (US Transportation) :(800) 424 - 9300

2. Hazard identification

Classification of the substance or mixture

Health hazards:

Eye Irritation, Category 2

Target Organ Toxicity (Single exposure), Category 2

Physical hazards:

Flammable Liquids, Category 2

Label elements



Flame



Exclamation
mark

Signal word: DANGER

Hazard statement(s)

H225: Highly flammable liquid and vapour.

H319: Causes serious eye irritation.

H336: May cause drowsiness or dizziness.

Precautionary statement(s)

Prevention:

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233: Keep container tightly closed.

P240: Ground and bond container and receiving equipment.

P241: Use explosion-proof [electrical/ventilating/lighting/...] equipment.

P242: Use non-sparking tools.

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P243: Take action to prevent static discharges.

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

Emergency overview

Immediate concerns: WARNING! Flammable liquid and vapor. Harmful or fatal if swallowed. Vapor harmful. May cause central nervous system depression. May be irritating to eyes and skin.

Potential health effects

Eye: Moderately irritating to eyes.

Skin: Mildly irritating to the skin.

Ingestion: Irritating to the gastrointestinal tract, causing abdominal pain and vomiting, sometimes bloody. Ingestion may cause CNS depression, low blood pressure, rapid heart beat and liver damage.

Inhalation: May cause mild irritation to the nose, throat and respiratory tract and may result in central nervous system (CNS) depression.

Medical conditions aggravated: Preexisting diseases in or history of ailments involving skin, central nervous system, liver and kidney.

3. Composition/information on ingredients

| Chemical name | % w/w | CAS No. |
|---------------|----------|---------|
| Isopropanol | 99 - 100 | 67-63-0 |

4. First-aid measures

Eye: Immediately flush eyes with plenty of water. Get medical attention, if irritation persists.

Skin: Flush skin with water while removing contaminated clothing. If irritation occurs, get medical attention. Do not reuse clothing or shoes until cleaned.

Ingestion: Rinse mouth with water. Do not induce vomiting; get medical attention.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

Most important symptoms and effects, both acute and delayed

Acute effects: Irritation as noted above. Early to moderate CNS depression may be evidenced by giddiness, headache, dizziness, and nausea; in extreme cases, unconsciousness and death may occur. Aspiration pneumonitis may be evidenced by coughing, labored breathing and cyanosis (bluish skin). Liver damage may be evidenced by loss of appetite, jaundice and sometimes pain in the upper abdomen on the right side.

5. Fire-fighting measures

Suitable extinguishing media: Use water fog, "alcohol" foam, dry chemical, or CO2.

Hazardous combustion products: Carbon monoxide and unidentified organic compounds may be formed during combustion.

Explosion hazards: When heated above the flash point, this material emits flammable vapors which, when mixed with air, can burn or be explosive. Fine mists or sprays may be flammable at temperatures below the flash point.

Fire fighting procedures: WARNING! Flammable Liquid. Clear fire area of unprotected personnel. Do not enter confined fire space without full bunker gear, including a positive pressure NIOSH approved SCBA. Cool fire exposed containers with water.

ISOPROPYL ALCOHOL 99**6. Accidental release measures**

General procedures: WARNING. Flammable. Ventilate area of leak or spill. Remove all sources of ignition. Clean-up personnel require protective clothing and respiratory protection from vapors. Only specially trained or qualified personnel should handle the emergency.

7. Handling and storage

General procedures: Keep away from heat, sparks, and flame. Surfaces that are hot may ignite even liquid product in the absence of sparks or flame. Extinguish pilot lights, cigarettes and turn off other sources of ignition prior to use and until all vapors are gone.

Comments: KEEP OUT OF REACH OF CHILDREN! Empty containers retain product residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks static electricity, or other sources of ignition; they may explode and cause injury or death. Observe all federal, state, and local regulations and National Fire Protection Association (NFPA) Codes with pertain to the specific local conditions of stage and use, including OSHA 29 CFR 1910.106 and NFPA 30, 70, 77, and 497.

8. Exposure controls/personal protection**Exposure controls**

| Control parameters | | | | |
|--------------------|------------------------------------|------|-------------------|-------------------|
| | Occupational exposure limit values | | | |
| Chemical name | Type | | ppm | mg/m ³ |
| Isopropanol | OSHA PEL | TWA | 400 | 980 |
| | ACGIH TLV | TWA | 200 | 490 |
| | | STEL | 400 | 960 |
| | Supplier OEL | TWA | NL ^[1] | NL ^[1] |
| | | STEL | NL | NL |

Footnotes:

1. NL = Not Listed

Appropriate engineering controls: Provide exhaust ventilation sufficient to keep the airborne concentration of this product below its exposure limits. Exhaust air may need to be cleaned by scrubbers or filters to reduce environmental contamination.

Individual protection measures, such as personal protective equipment

Eye / face protection: Use chemical safety goggles and/or full face shield where splashing is possible. Contact lenses should not be worn when working with this material. Maintain eye wash fountain and quick-drench facilities in work areas.

Skin protection - hand protection: Wear resistant gloves (consult your safety equipment supplier). To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

Respiratory protection: If exposure may or does exceed occupational exposure limits (Sec. 8) use a NIOSH approved respirator to prevent overexposure. In accord with 29 CFR 1910.134 use either an atmosphere-supplying respirator or an air-purifying respirator for organic vapors.

Skin protection - other: Where splashing is possible, full chemically resistant protective clothing (e.g., acid suit) and

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boots are required.

Occupational hygiene practices: Use good personal hygiene when handling this product. Wash hands after use, before eating, drinking, smoking, or using the toilet.

Other use precautions: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

9. Physical and chemical properties

Physical state: Liquid

Color: Clear, colorless liquid.

Odor: Mild odor.

Melting point: (-127°F)

Freezing point: NDA = no data available.

Initial boiling point and boiling range: (180°F) to (181°F)

Flash point: 12°C (53°F)

Evaporation rate (n-butyl acetate = 1): Slower than ether.

Lower explosion limit / flammability limit: 0.02

Upper explosion limit / flammability limit: 0.127

Vapor pressure: 32

Relative vapor density: Heavier than air.

Density: 6.545

Relative density: 0.78 to 0.80

Solubility: Infinitely soluble

Auto-ignition temperature: (750°F)

Percent volatiles: 100

VOC content: 6.55 LBS./gal.

10. Stability and reactivity

Reactivity: Yes

Dangerous polymerization: Will not occur.

Conditions to avoid: Avoid heat, sparks, flame and contact with strong oxidizing agents. Do not store or handle in aluminum equipment at temperatures above 120 deg. F.

Hazardous decomposition products: Carbon monoxide and unidentified organic compounds may be formed during combustion. There should be no decomposition if stored and applied as directed.

Incompatible materials: Strong oxidizers.

11. Toxicological information

Comments: None Expected.

12. Ecological information

Ecotoxicological information: Avoid uncontrolled releases of this material. Where spills are possible, a

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comprehensive spill response plan should be developed and implemented.

13. Disposal considerations

Disposal methods: The preferred options for disposal are to send to licensed reclaimers, or to permitted incinerators. Any disposal practice must be in compliance with federal, state, and local regulations. Do not dump into sewers, ground, or any body of water.

Empty container: KEEP OUT OF REACH OF CHILDREN! Empty containers retain product residue and can be dangerous. Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse. Do not pressurize, cut weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks static electricity, or other sources of ignition.

RCRA/EPA waste information: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

14. Transport information**USA Department of Transport Regulations (DOT)**

UN proper shipping name: Isopropanol

Transport hazard class(es): 3

UN number: UN 1219

Packing group, if applicable: II

NAERG: 129

Hazard label: Flammable liquid

15. Regulatory information**UNITED STATES****Dot label symbol and hazard classification**

Flammable

Liquid

R11: Highly flammable.

SARA Section 311/312 Hazard Categories

311/312 Health hazards: This product should be reported as an immediate (acute) health hazard, delayed (chronic) health hazard, and a fire hazard.

313 reportable ingredients: To the best of our knowledge, this product is not listed as a toxic chemical under Section 313 of SARA Title III.

EPCRA Section 313 Toxic Chemicals

| Chemical name | % w/w | CAS No. |
|---------------|----------|---------|
| Isopropanol | 99 - 100 | 67-63-0 |

ISOPROPYL ALCOHOL 99**EPCRA Section 302 Extremely Hazardous Substances**

EPCRA Status: To the best of our knowledge, this product is not listed as an extremely hazardous substance.

TSCA (The Toxic Substances Control Act)

| Chemical name | CAS No. |
|---------------|---------|
| Isopropanol | 67-63-0 |

TSCA Status: Listed.

CANADA**WHMIS Hazard Symbol and Classification**

Flammable
Liquid

S23: Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).

General comments: The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

16. Other information

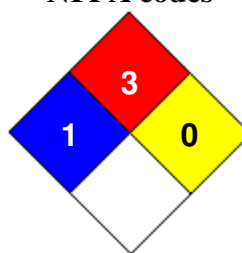
Reason for issue: Updated SDS information and changed to new format.

Prepared by: COMPLIANCE DEPT. **Date revised:** 08/25/2021

Revision summary: This SDS replaces the 07/29/2021 SDS. Revised: **Section 4: Ingestion.**

HMIS rating

| | |
|---------------------|---|
| Health | 1 |
| Flammability | 3 |
| Physical hazard | 0 |
| Personal protection | G |

NFPA codes

NFPA 30 / 30B Storage Classification: These ratings are part of a specific hazard communication program and should be disregarded where individuals are not trained in the use of this hazard rating system. You should be familiar with the hazard communication programs applicable to your workplace.

HMIS ratings notes: The HMIS rating involves data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in the SDS must be considered.

Additional SDS information: Last revision 06/13/20012

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