

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name Isopropyl Alcohol 99%

CAS number 67-63-0

- Synonyms IPA, Isopropyl Alcohol, Isopropanol
- 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses Laboratory chemical.

1.3 Details of the supplier of the safety data sheet

| Company | Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A. |
|-----------|--|
| Telephone | 512-668-9918 |
| Fax | 512-886-4008 |

1.4 Emergency telephone

| Emergency Phone # | US & Canada: 1-800-535-5053 | INFOTRAC |
|-------------------|------------------------------|----------|
| | International 1-352-323-3500 | INFOTRAC |

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) Flammable liquids (Category 2) Eye Irritation (Category 2A) Specific Target Organ Toxicity - single exposure (Category 3) Target Organ- Central Nervous System (CNS)

2.2 GHS Label elements, including precautionary statements

| Pictogram | |
|-----------------------------|---|
| Signal Word | Danger |
| Hazard statements | Highly flammable liquid and vapor Causes serious eye irritation May cause drowsiness or dizziness |
| Precautionary statements | Wash face, hands and any exposed skin thoroughly after handling Avoid breathing dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area 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 Keep cool IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower 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 In case of fire: Use CO2, dry chemical, or foam for extinction Store in a well-ventilated place. Keep container tightly closed Store locked up Dispose of contents/container to an approved waste |

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS None identified.

SECTION 3: Composition/information on ingredients

3.1 Components

| Chemical name | Common name and synonyms | CAS number | Concentration |
|-------------------|-------------------------------------|------------|---------------|
| Isopropyl Alcohol | IPA, Isopropyl Alcohol, Isopropanol | 67-63-0 | > 99.8% |

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

| If inhaled | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell. |
|-------------------------|---|
| In case of skin contact | Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if irritation develops and persists. |
| In case of eye contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention. |
| If swallowed | Rinse mouth. Get medical attention if symptoms occur. |

4.2 Most important symptoms and effects, both acute and delayed

May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

4.3 Indication of any immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

5.1 Extinguishing media

| Suitable extinguishing media | Water fog. Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO2). |
|--------------------------------|---|
| Unsuitable extinguishing media | Do not use water jet as an extinguisher, as this will spread the fire. |

5.2 Specific hazards arising from the substance or mixture

Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed. Combustion products may include: carbon oxides.

5.3 Special 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.

5.4 Further information

Flash Point53.6 °F / 12.0 °C (Closed Cup)

Autoignition Temperature 750.2 °F / 399 °C

Explosion limits

| Upper | 12.7% v/ | v | |
|---------------------------------|------------------|-------------|----|
| Lower | 2% v/v | | |
| Sensitivity | to Mechanical Im | pact | No |
| Sensitivity to Static Discharge | | No | |
| NFPA | | | |
| Health | Flammability | Instability | |

No information available. No information available.

| Health | Flammability | Instability | Physical hazards |
|--------|--------------|-------------|------------------|
| 2 | 3 | 0 | N/A |

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Use personal protective equipment as required. Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharge.

6.2 Environmental precautions

Should not be released into the environment. See Section 12 for additional Ecological Information.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof equipment.

6.4 Reference to other sections

See Section 2 for full list of hazard and precaution statements.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions on safe handling

Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid contact with eyes. Avoid prolonged exposure. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks and flame. Flammables area.

Incompatibilities

Strong oxidizing agents, Strong acids, Metals.

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

| Component | Туре | Va | lue |
|-------------------|------|---------|-----------|
| Isopropyl Alcohol | TWA | 400 ppm | 980 mg/m3 |

US. ACGIH Threshold Limit Values

| Component | Туре | Value |
|--------------------|------|---------|
| Isopropyl Alcohol | TWA | 200 ppm |
| Isopi opyr Alconor | STEL | 400 ppm |

US. NIOSH: Pocket Guide to Chemical Hazards

| Component | Туре | Value |
|-------------------|------|--------------------|
| | IDLH | 2000 ppm |
| Isopropyl Alcohol | TWA | 400 ppm 980 mg/m3 |
| | STEL | 500 ppm 1225 mg/m3 |

Biological occupational exposure limits

No information available.

8.2 Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting equipment. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Eye/face protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin protection

Wear appropriate protective gloves.

Body Protection

Wear appropriate clothing to prevent skin exposure.

Respiratory protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Control of environmental exposure

Do not let product enter drains. Risk of explosion.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| Physical State | Liquid |
|--|----------------------------|
| Appearance | Colorless |
| Odor | Alcohol-like |
| Odor Threshold | No information available. |
| Нq | No information available. |
| Melting Point/Range | -129.1 °F / -89.5 °C |
| Boiling Point/Range | 181.4 °F / 83 °C |
| Evaporation Rate | 3 |
| Flammability (solid) | Not applicable. |
| Flammability or explosive limit | |
| Upper | 12.7% v/v |
| Lower | 2% v/v |
| Vapor Pressure | 43.2 hPa (68 °F / 20 °C) |
| Vapor Density | 2.1 |
| Density | 0.785 g/ml (77 °F / 25 °C) |
| Solubility | Completely soluble |
| Partition coefficient; n-octanol/water | 0.05 |
| Autoignition Temp | 750.2 °F / 399 °C |
| Decomposition Temp | No information available. |
| Viscosity | No information available. |
| Molecular Formula | C3H8O |
| Molecular Weight | 60.1 g/mol |
| VOC Content(%) | No information available. |
| Oxidizing properties | None. |

9.2 Other safety information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

None known, based on information available.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Avoid direct light. Contact with incompatible materials.

10.5 Incompatible materials

Strong oxidizing agents, Strong acids, Metal.

10.6 Hazardous decomposition products

No hazardous decomposition products are known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|-------------------|------------------|----------------------|-----------------|
| Isopropyl Alcohol | 4710 mg/kg (rat) | 12870 mg/kg (rabbit) | 72.6 mg/L (rat) |

Skin corrosion/irritation

Repeated exposure may cause skin dryness or cracking.

Serious eye damage/eye irritation

Causes serious eye irriitation.

Respiratory or skin sensitization

Not a respiratory sensitizer. This product is not expected to cause skin sensitization.

Germ cell mutagenicity

No information available.

Carcinogenicity

| Component | CAS | IARC | NTP | ACGIH | OSHA | Mexico |
|-------------------|---------|------------|------------|------------|------------|------------|
| Isopropyl Alcohol | 67-63-0 | Not listed |

Specific target organ toxicity - single exposure

Central Nervous System

Specific target organ toxicity - repeated exposure

None known.

Reproductive toxicity

No information available.

Chronic effects

Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea, and vomiting.

11.2 Additional Information

The toxicological properties have not been fully investigated.

SECTION 12: Ecological information

12.1 Toxicity

| Product | | Species | Test Resul | ts |
|-------------------|------|---------------------------|----------------|-------|
| Isopropyl Alcohol | EC50 | Desmodesmus subspicatus | > 1000 mg/L | 72 h |
| | EC50 | Desmodesmus subspicatus | > 1000 mg/L | 96 h |
| | LC50 | Pimephales promelas | 9640 mg/L | 96 h |
| | LC50 | Lepomis macrochirus | > 1400000 µg/L | 96 h |
| | LC50 | Pimephales promelas | 11130 mg/L | 96 h |
| | LC50 | Daphnia | 10000000 µg/L | 96 h |
| | EC50 | Photobacterium phosphorem | 3590 mg/L | 5 min |
| | EC50 | Water flea | 13299 mg/L | 48 h |
| | EC50 | Water flea | 9714 mg/L | 24 h |

12.2 Persistence and degradability

Persistence is unlikely based on information available.

12.3 Bio accumulative potential

No information available.

12.4 Mobility in soil

Will likely be mobile in the environment due to its volatility.

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Endocrine disrupting properties No information available.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14: Transport information

DOT (US)

| UN-no | UN1219 |
|----------------------|-------------|
| Proper Shipping Name | Isopropanol |
| Hazard Class | 3 |
| Packing Group | II |
| | |
| IMDG | |
| UN-no | UN1219 |
| Proper Shipping Name | Isopropanol |
| Hazard Class | 3 |
| Packing Group | II |
| - | |
| ΙΑΤΑ | |

| UN-no | UN1219 |
|----------------------|-------------|
| Proper Shipping Name | Isopropanol |
| Hazard Class | 3 |
| Packing Group | II |
| | |

SECTION 15: Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous See section 2 for more information.

SARA 313 (TRI reporting)

Listed. Weight: 64.7%; Threshold value: 1.0%

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) Not regulated.

Safe Drinking Water Act Not regulated.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Not listed.

US state regulations

US. Massachusetts RTK - Substance List Listed.

US. New Jersey Worker and Community Right-to-Know Act Listed.

US. Pennsylvania Worker and Community Right-to-Know Law Listed.

California Proposition 65 Listed.

SECTION 16: Other information

Issue date: 06/11/2018 Revision 1: 06/07/2023 Revision 2: 10/03/2024

SECTION 17: Disclaimer

The information provided on 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 a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.