



Isopropyl Alcohol 70%

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Issue date: 02/04/2021 Version 1.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Isopropyl Alcohol 70%

1.2. Recommended use and restrictions on use

Recommended use : Laboratory chemicals, Manufacture of bulk, large scale chemicals (including petroleum products)
Restrictions on use : Consumer uses: Private households (= general public = consumers)

1.3. Supplier

TWIN CHEMICALS INC.
6175 Hickory Flat Hwy. Suite 110-344
Canton, GA 30115
770-924-5333 (t)
WEBSITE: www.twinchemicals.com

1.4. Emergency telephone number

Emergency number : 800-552-3787

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquids Category 2 H225
Serious eye damage/eye irritation Category 2 H319
Specific target organ toxicity (single exposure) Category 3 H336

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Danger
Hazard statements (GHS US) : H225 - Highly flammable liquid and vapor
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness
Precautionary statements (GHS US) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 - Keep container tightly closed.
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 skin 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.

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P312 - Call a poison center or doctor if you feel unwell.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P370+P378 - In case of fire: Use media other than water to extinguish.
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, and/or international regulations.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | Conc. | GHS US classification |
|-------------------|---------------------|-------|---|
| Isopropyl Alcohol | (CAS-No.) 67-63-0 | 70 | Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 |
| Water | (CAS-No.) 7732-18-5 | 30 | Not classified |

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Call a poison center/doctor/physician if you feel unwell.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing.
First-aid measures after eye contact : 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.
First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : May cause drowsiness or dizziness.
Symptoms/effects after eye contact : Eye irritation.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

Fire hazard : Highly flammable liquid and vapor.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.

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6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment.
Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| | |
|---|---------|
| Isopropyl Alcohol 70% | |
| No additional information available | |
| Isopropyl Alcohol (67-63-0) | |
| USA - ACGIH - Occupational Exposure Limits | |
| ACGIH TWA (ppm) | 200 ppm |
| ACGIH STEL (ppm) | 400 ppm |
| Water (7732-18-5) | |
| No additional information available | |

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses. Protective goggles.

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

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Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|---|
| Physical state | : Liquid |
| Color | : Mixture contains one or more component(s) which have the following color(s): Colorless |
| Odor | : There may be no odor warning properties, odor is subjective and inadequate to warn of overexposure. Mixture contains one or more component(s) which have the following odor: Alcohol odor |
| Odor threshold | : No data available |
| pH | : No data available |
| Melting point | : Not applicable |
| Freezing point | : No data available |
| Boiling point | : 179.6 |
| Flash point | : 53.6 °F |
| Relative evaporation rate (butyl acetate=1) | : No data available |
| Flammability (solid, gas) | : Not applicable. |
| Vapor pressure | : No data available |
| Relative vapor density at 20 °C | : No data available |
| Relative density | : No data available |
| Specific gravity / density | : 0.92 g/ml |
| Solubility | : Water: Solubility in water of component(s) of the mixture : • Isopropyl Alcohol 99%: miscible |
| Partition coefficient n-octanol/water (Log Pow) | : No data available |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Viscosity, kinematic | : 2.53 mm ² /s |
| Viscosity, dynamic | : 0.002 Pa·s |
| Explosion limits | : No data available |
| Explosive properties | : No data available |
| Oxidizing properties | : No data available |

9.2. Other information

No additional information available

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SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapor.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

| Isopropyl Alcohol (67-63-0) | |
|-----------------------------|---|
| LD50 oral rat | 5840 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Experimental value, Oral, 14 day(s)) |
| LD50 dermal rabbit | 16400 mg/kg body weight (Equivalent or similar to OECD 402, 24 h, Rabbit, Experimental value, Dermal, 14 day(s)) |
| LC50 inhalation rat (ppm) | > 10000 ppm (Equivalent or similar to OECD 403, 6 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s)) |
| ATE US (oral) | 5840 mg/kg body weight |
| ATE US (dermal) | 16400 mg/kg body weight |

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

| Isopropyl Alcohol (67-63-0) | |
|-----------------------------|----------------------|
| IARC group | 3 - Not classifiable |

Reproductive toxicity : Not classified

STOT-single exposure : May cause drowsiness or dizziness.

| Isopropyl Alcohol (67-63-0) | |
|-----------------------------|------------------------------------|
| STOT-single exposure | May cause drowsiness or dizziness. |

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

Viscosity, kinematic : 2.53 mm²/s

Symptoms/effects : May cause drowsiness or dizziness.

Symptoms/effects after eye contact : Eye irritation.

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

| Isopropyl Alcohol (67-63-0) | |
|-----------------------------|--|
| LC50 fish 1 | 9640 – 10000 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, Lethal) |

12.2. Persistence and degradability

| Isopropyl Alcohol (67-63-0) | |
|---------------------------------|--|
| Persistence and degradability | Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Readily biodegradable in water. |
| Biochemical oxygen demand (BOD) | 1.19 g O ₂ /g substance |
| Chemical oxygen demand (COD) | 2.23 g O ₂ /g substance |
| ThOD | 2.4 g O ₂ /g substance |

12.3. Bioaccumulative potential

| Isopropyl Alcohol (67-63-0) | |
|---|--|
| Partition coefficient n-octanol/water (Log Pow) | 0.05 (Weight of evidence approach, 25 °C) |
| Bioaccumulative potential | Low potential for bioaccumulation (Log Kow < 4). |

12.4. Mobility in soil

| Isopropyl Alcohol (67-63-0) | |
|---|--|
| Surface tension | 0.021 N/m (25 °C) |
| Partition coefficient n-octanol/water (Log Koc) | 0.185 – 0.541 (log Koc, SRC PCKOCWIN v2.0, Calculated value) |
| Ecology - soil | Highly mobile in soil. |

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Additional information : Flammable vapors may accumulate in the container.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN1219 Isopropanol, 3, II
UN-No.(DOT) : UN1219
Proper Shipping Name (DOT) : Isopropanol
Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
Packing group (DOT) : II - Medium Danger
Hazard labels (DOT) : 3 - Flammable liquid



DOT Packaging Non Bulk (49 CFR 173.xxx) : 202
DOT Packaging Bulk (49 CFR 173.xxx) : 242

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| | |
|--|--|
| DOT Special Provisions (49 CFR 172.102) | : IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized. T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. |
| DOT Packaging Exceptions (49 CFR 173.xxx) | : 4b, 150 |
| DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) | : 5 L |
| DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) | : 60 L |
| DOT Vessel Stowage Location | : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded. |
| Emergency Response Guide (ERG) Number | : 129 |
| Other information | : No supplementary information available. |

Transportation of Dangerous Goods

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

| | | |
|---|---|-----|
| Isopropyl Alcohol 70% | | |
| Not listed on the United States TSCA (Toxic Substances Control Act) inventory | | |
| SARA Section 311/312 Hazard Classes | Physical hazard - Flammable (gases, aerosols, liquids, or solids) Health hazard - Serious eye damage or eye irritation Health hazard - Specific target organ toxicity (single or repeated exposure) | |
| All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory | | |
| Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372. | | |
| Isopropyl Alcohol | CAS-No. 67-63-0 | 70% |

15.2. International regulations

CANADA

| | |
|---|--|
| Isopropyl Alcohol 70% | |
| Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List) | |
| Isopropyl Alcohol (67-63-0) | |
| Listed on the Canadian DSL (Domestic Substances List) | |

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

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| Component | State or local regulations |
|--------------------------------|--|
| Isopropyl Alcohol 99%(67-63-0) | U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List |

SECTION 16: Other information

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Full text of H-phrases:

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

Hazard Rating

Health

: 1 Slight Hazard - Irritation or minor reversible injury possible

Flammability

: 3 Serious Hazard - Materials capable of ignition under almost all normal temperature conditions. Includes flammable liquids with flash points below 73 F and boiling points above 100 F. as well as liquids with flash points between 73 F and 100 F. (Classes IB & IC)

Physical

: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

SDS US (GHS HazCom 2012)

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