

Safety Data Sheet

According to Hazardous Products Regulation (SOR/2015-17)

Revision date: 09.11.2023

Version: 6.5

Print date: 09.11.2023

SECTION 1: Identification

Product identifier

| | |
|--------------------------------|--|
| Trade name/designation: | Isopropyl alcohol 70% Laboratory Reagent Lab Grade |
| Product No.: | BDH1131-204L, BDH1131-4LP |
| Synonyms: | none |
| CAS No.: | 67-63-0 |
| Other means of identification: | |

Relevant identified uses of the substance or mixture and uses advised against

| | |
|-----------------------|------------------------------------|
| Recommended use: | For Further Manufacturing Use Only |
| Uses advised against: | Not for Human or Animal Drug Use |

Details of the supplier of the safety data sheet

Supplier

VWR International

| | |
|------------------|--|
| Street | 2360 Argentia Road |
| Postal code/City | Mississauga, Ontario |
| | Canada L5N 5Z7 |
| Telephone | +1-800-932-5000 toll-free within US/Canada |
| Telefax | +1-610-728-2103 |

Emergency phone number

Telephone +1-613-996-6666 (Canutec, 24 hrs/day, 7 days/week, Canada)

Preparation Information

VWR International - Product Information Compliance

E-mail SDS@avantorsciences.com

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

Classification according to Hazardous Products Regulation (SOR/2015-17)

| Hazard classes and hazard categories | Hazard statements |
|---|-------------------|
| Flammable liquid, category 2 | H225 |
| Eye irritation, category 2 | H319 |
| Specific target organ toxicity (single exposure), category 3, narcotic effect | H336 |

2.2 Label elements

Labelling in accordance with (SOR/2015-17)

Hazard pictograms



Signal word: Danger

| 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, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P233 | Keep container tightly closed. |
| P243 | Take precautionary measures against static discharge. |
| P240 | Ground/bond container and receiving equipment. |
| P241 | Use explosion-proof electrical/ventilating/lighting/equipment. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P264 | Wash hands thoroughly after handling. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P242 | Use only non-sparking tools. |
| 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... 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 to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. |

Hazard(s) not otherwise classified (HNOC)

none

SECTION 3: Composition/information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

Hazardous ingredients GHS Classification in accordance with (SOR/2015-17)

| Substance name | Concentration | Identifier | Hazard classes and hazard categories |
|----------------|---------------|------------------|--|
| 2-Propanol | 60 - 70% | CAS No.: 67-63-0 | Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336 |

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Do not leave affected person unattended. Take off immediately all contaminated clothing. When in doubt or if symptoms are observed, get medical advice.

In case of inhalation

Remove casualty to fresh air and keep warm and at rest. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. In case of respiratory tract irritation, consult a physician.

In case of skin contact

Remove contaminated, saturated clothing immediately. Wash with plenty of soap and water. If skin irritation occurs: Get medical help.

After eye contact:

Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist.

In case of ingestion

Never give anything by mouth to an unconscious person or a person with cramps. Rinse mouth thoroughly with water. Spit out all liquid. Induce vomiting when the affected person is not unconscious. Seek medical advice immediately.

Self-protection of the first aider

First aider: Pay attention to self-protection! Wear personal protection equipment (refer to section 8).

4.2 Most important symptoms/effects, acute and delayed

Irritation Cough. Dyspnoea. Anaesthetic state Dizziness.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Symptoms can occur only after several hours.

SECTION 5: Fire fighting measures

5.1 Extinguishing media

Suitable extinguishing media

ABC-powder
Carbon dioxide (CO₂).
Dry sand
Nitrogen

Extinguishing media which must not be used for safety reasons

Full water jet.

5.2 Specific hazards arising from the chemical

Flammable liquids.
Risk of ignition.
Vapor may form explosive mixtures with air.
Vapors can travel considerable distances to a source of ignition where they can ignite, flash back, or explode.
Closed containers may burst when pressure and temperature rise.
In case of fire may be liberated:
Pyrolysis products, toxic

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes.
Protective equipment and precautions for firefighters:
Wear a self-contained breathing apparatus and chemical protective clothing.
Co-ordinate fire-fighting measures to the fire surroundings.

In case of fire: Evacuate area.

Use water spray/stream to protect personnel and to cool endangered containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Wear personal protection equipment (refer to section 8). Avoid contact with eyes and skin. Do not breathe gas/fume/vapor/spray. Keep away from sources of ignition - No smoking. Provide adequate ventilation. Remove victim out of the danger area. First Aid, decontamination, treatment of symptoms.

6.2 Environmental precautions

Do not allow to enter into surface water or drains. Fire hazard.

6.3 Methods and material for containment and cleaning up

Take up mechanically, placing in appropriate containers for disposal. Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Dispose according to legislation. Ventilate affected area.

6.4 Reference to other sections

Personal protection equipment (PPE): see section 8 Disposal information: see section 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advices on safe handling

Wear personal protection equipment (refer to section 8).

Avoid contact with eyes and skin.

Avoid inhalation of the product.

Use extractor hood (laboratory).

Provide adequate ventilation.

Measures to prevent fire, aerosol and dust generation

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

Take precautionary measures against static discharges.

Measures required to protect the environment

Due to danger of explosion, prevent leakage of vapors into cellars, flues and ditches.

Wash hands before breaks and after work. Avoid contact with eyes and skin. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

7.2 Conditions for safe storage, including any incompatibilities

Recommended storage temperature: 15-25 °C

Storage: Keep container tightly closed and in a well-ventilated place. Keep/Store away from combustible materials. Protect from sunlight. Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Suitable container/equipment material:

Glass Steel Stainless steel Unsuitable container/equipment material: Aluminium Polyethylene PVC (polyvinyl chloride)

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

| Ingredient (Designation) | Source | Country | parameter | Limit value |
|--------------------------|--------|---------|-----------|----------------------------------|
| 2-Propanol | CNESST | CA | VECD | 1230 mg/m ³ - 500 ppm |
| 2-Propanol | CNESST | CA | VEMP | 983 mg/m ³ - 400 ppm |

8.2 Engineering controls

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment. If handled uncovered, arrangements with local exhaust ventilation have to be used.

Personal protection equipment (PPE)

Wear suitable protective clothing. When handling with chemical substances, protective clothing must be worn.

Eye/face protection

Eye glasses with side protection

Skin protection

Wear suitable gloves. When handling with chemical substances, protective gloves must be worn. In the case of wanting to use the gloves again, clean them before taking off and air them well. Check leak tightness/impermeability prior to use.

By short-term hand contact

| | |
|----------------------------------|----------------------|
| Suitable material: | NBR (Nitrile rubber) |
| Thickness of the glove material: | 0,12 mm |
| Breakthrough time | 51 min |

By long-term hand contact

| | |
|----------------------------------|----------------------|
| Suitable material: | NBR (Nitrile rubber) |
| Thickness of the glove material: | 0,38 mm |
| Breakthrough time | > 480 min |

Respiratory protection

Respiratory protection necessary at: aerosol or mist formation If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn.

Additional information

Wash hands before breaks and after work. Avoid contact with eyes and skin. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

Environmental exposure controls

no data available

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| | |
|-----------------|----------------|
| Appearance | |
| Physical state: | liquid |
| Color: | colorless |
| Odor: | characteristic |

Safety relevant basic data

| | |
|--|------------------------------------|
| pH: | no data available |
| Melting point/freezing point: | no data available |
| Initial boiling point and boiling range: | no data available |
| Flash point: | 20.5 °C |
| Flammability: | Highly flammable liquid and vapor. |
| Lower and upper explosion limit | |
| Lower explosion limit: | no data available |
| Upper explosion limit: | no data available |
| Vapor pressure: | no data available |
| Relative vapour density: | 2.1 |
| Density and/or relative density | |
| Density: | 0.85 g/cm ³ (20 °C) |
| Solubility(ies) | |
| Water solubility: | miscible |
| Partition coefficient: n-octanol/water: | no data available |
| Auto-ignition temperature: | no data available |
| Decomposition temperature: | not applicable |
| Viscosity | |
| Kinematic viscosity: | no data available |
| Dynamic viscosity: | no data available |
| Particle characteristics: | does not apply to liquids |

9.2 Other information

| | |
|------------------------|-------------------|
| Evaporation rate: | no data available |
| Explosive properties: | no data available |
| Oxidising properties: | not applicable |
| Bulk density: | no data available |
| Refraction index: | no data available |
| Dissociation constant: | no data available |
| Surface tension: | no data available |
| Henry's Law Constant: | no data available |

SECTION 10: Stability and reactivity

10.1 Reactivity

- Reactive substance.
- Vapors may form explosive mixtures with air.

Risk of ignition.

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

Violent reaction with:

Alkali metals
Acetic anhydride
Peroxides
Nitric acid
Phosphorus oxides
Perchlorates
Halogenated compounds

10.4 Conditions to avoid

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

10.5 Incompatible materials:

Oxidising agent.
Peroxides
Strong acid
Hydrogen
arsenic
antimony

10.6 Hazardous decomposition products

Decomposition products in case of fire: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute effects

Acute oral toxicity:

2-Propanol - LD50: > 5045 mg/kg - Rat - (RTECS)

2-Propanol - LDLo: > 3570 mg/kg - Human - (RTECS)

Acute dermal toxicity:

2-Propanol - LD50: > 12800 mg/kg - Rabbit - (RTECS)

Acute inhalation toxicity:

2-Propanol - LC50: 72600 mg/m³ - Rat - (Japan GHS Basis for Classification Data)

Irritant and corrosive effects:

Primary irritation to the skin:

not applicable

Irritation to eyes:

Causes serious eye irritation.

Irritation to respiratory tract:

not applicable

Respiratory or skin sensitization

In case of skin contact: not sensitizing

In case of inhalation: not sensitizing

STOT-single exposure

May cause drowsiness or dizziness.

STOT-repeated exposure

not applicable

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity

No indication of human carcinogenicity.

Germ cell mutagenicity

No indications of human germ cell mutagenicity exist.

Reproductive toxicity

No indications of human reproductive toxicity exist.

Aspiration hazard

not applicable

Other adverse effects

no data available

Additional information

no data available

SECTION 12: Ecological information

12.1 Toxicity

Fish toxicity:

2-Propanol - LC50: 4200 - 11100 mg/l (96 h) - Brooke, L.T., D.J. Call, D.L. Geiger, and C.E. Northcott 1984. Acute Toxicities of Organic Chemicals to Fathead Minnows (*Pimephales promelas*), Vol. 1. Center for Lake Superior Environmental Stud., Univ. of Wisconsin-Superior, Superior, WI :414

Daphnia toxicity:

2-Propanol - LC50: 1400 mg/l (48 h) - Blackman, R.A.A. 1974. Toxicity of Oil-Sinking Agents. Mar.Pollut.Bull. 5:116-118

Algae toxicity:
no data available

Bacteria toxicity:
no data available

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water: no data available

12.4 Mobility in soil:

no data available

12.5 Results of PBT/vPvB assessment

not applicable

12.6 Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to the environment.

12.7 Other adverse effects

no data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Appropriate disposal / Product

Dispose according to legislation. Consult the appropriate local waste disposal expert about waste disposal.

Waste code product: no data available

Appropriate disposal / Package

Dispose according to legislation. Handle contaminated packages in the same way as the substance itself. This material and its container must be disposed of as hazardous waste. Do not open container by force. Warning: Do not refill! Do not pierce or burn, even after use.

Additional information

none

No further relevant information available.

SECTION 14: Transport information

Land transport (TDG)

| | |
|-------------------------------|-------------|
| UN-No.: | 1219 |
| Proper Shipping Name: | ISOPROPANOL |
| Class(es): | 3 |
| Packing group: | II |
| Environmental hazards: | No |
| Marine pollutant: | No |
| Special precautions for user: | |

Sea transport (IMDG)

| | |
|--|--------------|
| UN-No.: | 1219 |
| Proper Shipping Name: | ISOPROPANOL |
| Class(es): | 3 |
| Classification code: | |
| Hazard label(s): | 3 |
| Packing group: | II |
| Environmental hazards: | No |
| Marine pollutant: | No |
| Special precautions for user: | |
| Segregation group: | - |
| EmS-No. | F-E S-D |
| Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | not relevant |

Air transport (ICAO-TI / IATA-DGR)

| | |
|-------------------------------|-------------|
| UN-No.: | 1219 |
| Proper Shipping Name: | ISOPROPANOL |
| Class(es): | 3 |
| Classification code: | |
| Hazard label(s): | 3 |
| Packing group: | II |
| Special precautions for user: | |

SECTION 15: Regulatory information

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

Domestic Substance List:

SECTION 16: Other information

Abbreviations and acronyms

ACGIH - American Conference of Governmental Industrial Hygienists
 DOT - Department of Transportation
 IARC - International Agency for Research on Cancer
 IATA-DGR - International Air Transport Association-Dangerous Goods Regulations
 ICAO-TI - International Civil Aviation Organization-Technical Instructions
 IMDG - International Maritime Code for Dangerous Goods
 LTV - Long Term Value
 NIOSH - National Institute for Occupational Safety and Health
 NTP - National Toxicology Program
 OSHA - Occupational Safety & Health Administration
 PBT - Persistent, Bioaccumulative and Toxic
 PEL - Permissible Exposure Limit
 STV - Short Term Value
 SVHC - Substances of Very High Concern
 TDG - Transport of Dangerous Goods
 TLV - Threshold Limit Value
 vPvB - very Persistent, very Bioaccumulative

Key literature references and sources for data

This Safety Data Sheet has been prepared based on information available for public as TOXNET information, European Chemicals Agency (ECHA) substance dossier, papers from international cancer research institutes (IARC Monographs), U.S. National Toxicology Program data, U.S. Agency for Toxic Substances and Disease Control (ATSDR), PubChem websites and SDS from our raw material manufacturers.

| Revision date | Version | Print date |
|---------------|---------|------------|
| 09.11.2023 | 6.5 | 09.11.2023 |

Additional information

Indication of changes none/none

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guidance. The information in this document is based on the present state knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. VWR International and his Affiliates shall not be held liable for any damage resulting from handling.