

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixtures  
Product name : Isopropanol, 70% v/v  
CAS-No. : 67-63-0  
Product code : LC15760  
Formula : C<sub>3</sub>H<sub>8</sub>O

#### 1.2. Recommended use and restrictions on use

Use of the substance/mixture : Disinfectant  
Solvent  
Recommended use : Laboratory chemicals  
Restrictions on use : Not for food, drug or household use

#### 1.3. Supplier

LabChem, Inc.  
1010 Jackson's Pointe Ct.  
Zelienople, PA 16063 - USA  
T 412-826-5230 - F 724-473-0647  
info@labchem.com - www.labchem.com

#### 1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300 or +1-703-741-5970

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS US classification

Flammable liquids Category 2 H225 Highly flammable liquid and vapor  
Serious eye damage/eye irritation Category 2A H319 Causes serious eye irritation  
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation H335 May cause respiratory irritation  
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  
H335 - May cause respiratory irritation

Precautionary statements (GHS US) : P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking.  
P233 - Keep container tightly closed.  
P240 - Ground/bond container and receiving equipment.  
P241 - Use explosion-proof electrical, lighting, ventilating equipment.  
P242 - Use only non-sparking tools.  
P243 - Take precautionary measures against static discharge.  
P261 - Avoid breathing mist, spray, vapors.  
P264 - Wash exposed skin thoroughly after handling.  
P271 - Use only outdoors or in a well-ventilated area.  
P280 - Wear eye protection, face protection, protective clothing, protective gloves.  
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
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 or doctor/physician if you feel unwell.

# Isopropanol, 70% v/v

## Safety Data Sheet

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

P337+P313 - If eye irritation persists: Get medical advice/attention.  
P370+P378 - In case of fire: Use dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2) to extinguish  
P403+P235 - Store in a well-ventilated place. Keep cool.  
P405 - Store locked up.  
P501 - Dispose of contents/container to comply with local, state and federal regulations.  
If inhaled: Remove person to fresh air and keep comfortable for breathing.

### 2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification : None.

### 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  | %  | GHS US classification                                        |
|--------------------------------|---------------------|----|--------------------------------------------------------------|
| Isopropyl Alcohol (2-Propanol) | (CAS-No.) 67-63-0   | 70 | Flam. Liq. 2, H225<br>Eye Irrit. 2A, H319<br>STOT SE 3, H335 |
| 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 : Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with labored breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital. Never give alcohol to drink.

First-aid measures after inhalation : Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

First-aid measures after skin contact : Rinse with water. Soap may be used. Do not apply (chemical) neutralizing agents. Take victim to a doctor if irritation persists.

First-aid measures after eye contact : Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists.

First-aid measures after ingestion : Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Do not induce vomiting. Give activated charcoal. Call Poison Information Centre ([www.big.be/antigif.htm](http://www.big.be/antigif.htm)). Consult a doctor/medical service if you feel unwell. Ingestion of large quantities: immediately to hospital.

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

Potential Adverse human health effects and symptoms : Non-toxic if swallowed (LD50 oral, rat > 5000 mg/kg). Non-toxic in contact with skin (LD50 skin > 5000 mg/kg). Not irritant to skin. May cause drowsiness or dizziness. Practically non-toxic by inhalation (LC50 inh, rat > 20 mg/l/4h). Causes serious eye irritation.

Symptoms/effects after inhalation : EXPOSURE TO HIGH CONCENTRATIONS: Coughing. Dry/sore throat. Central nervous system depression. Dizziness. Headache. Narcosis.

Symptoms/effects after skin contact : Dry skin.

Symptoms/effects after eye contact : Irritation of the eye tissue.

Symptoms/effects after ingestion : AFTER ABSORPTION OF LARGE QUANTITIES: Central nervous system depression. Headache. Dilatation of the blood vessels. Low arterial pressure. Nausea. Vomiting. Abdominal pain. Disturbed motor response. Disturbances of consciousness. FOLLOWING SYMPTOMS MAY APPEAR LATER: Body temperature fall. Slowing respiration.

Chronic symptoms : ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Red skin. Dry skin. Itching. Cracking of the skin. Skin rash/inflammation. Impaired memory.

### 4.3. Immediate medical attention and special treatment, if necessary

No additional information available

# Isopropanol, 70% v/v

## Safety Data Sheet

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

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Quick-acting ABC powder extinguisher. Quick-acting BC powder extinguisher. Quick-acting class B foam extinguisher. Quick-acting CO2 extinguisher. Class B foam (alcohol-resistant). Water spray if puddle cannot expand.
- Unsuitable extinguishing media : Water (quick-acting extinguisher, reel); risk of puddle expansion. Water; risk of puddle expansion.

#### 5.2. Specific hazards arising from the chemical

- Fire hazard : DIRECT FIRE HAZARD. Highly flammable liquid and vapour. Gas/vapor flammable with air within explosion limits. INDIRECT FIRE HAZARD. May be ignited by sparks. Gas/vapor spreads at floor level: ignition hazard.
- Explosion hazard : DIRECT EXPLOSION HAZARD. Gas/vapour explosive with air within explosion limits. INDIRECT EXPLOSION HAZARD. may be ignited by sparks. Reactions with explosion hazards: see "Reactivity Hazard".
- Hazardous decomposition products in case of fire : Upon combustion: CO and CO2 are formed.

#### 5.3. Special protective equipment and precautions for fire-fighters

- Firefighting instructions : Cool tanks/drums with water spray/remove them into safety. Do not move the load if exposed to heat.
- Protection during firefighting : Heat/fire exposure: compressed air/oxygen apparatus.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

- Protective equipment : Gloves (EN 374). Protective goggles (EN 166). Protective clothing (EN 14605 or EN 13034). Large spills/in enclosed spaces: self-contained breathing apparatus (EN 136 + EN 137).
- Emergency procedures : Keep upwind. Mark the danger area. Consider evacuation. Close doors and windows of adjacent premises. Stop engines and no smoking. No naked flames or sparks. Spark- and explosion-proof appliances and lighting equipment. Keep containers closed. Wash contaminated clothes.

##### 6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Stop leak if safe to do so. Ventilate area.

#### 6.2. Environmental precautions

Prevent spreading in sewers.

#### 6.3. Methods and material for containment and cleaning up

- For containment : Contain released substance, pump into suitable containers. Plug the leak, cut off the supply. Dam up the liquid spill. Try to reduce evaporation. Measure the concentration of the explosive gas-air mixture. Dilute/disperse combustible gas/vapour with water curtain. Provide equipment/receptacles with earthing. Do not use compressed air for pumping over spills.
- Methods for cleaning up : Take up liquid spill into absorbent material, e.g.: dry sand/earth/vermiculite or powdered limestone. Scoop absorbed substance into closing containers. Damaged/cooled tanks must be emptied. Do not use compressed air for pumping over spills. Carefully collect the spill/leftovers. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

#### 6.4. Reference to other sections

No additional information available

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Precautions for safe handling : Use spark-/explosionproof appliances and lighting system. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Measure the concentration in the air regularly. Work under local exhaust/ventilation. Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Handle uncleaned empty containers as full ones. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Do not use compressed air for pumping over.

# Isopropanol, 70% v/v

## Safety Data Sheet

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

Hygiene measures : Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

### 7.2. Conditions for safe storage, including any incompatibilities

Incompatible products : Oxidizing agent. silver nitrate. Sodium hypochlorite.  
Incompatible materials : Direct sunlight. Heat sources. Sources of ignition.  
Storage temperature : 15 – 25 °C  
Heat-ignition : KEEP SUBSTANCE AWAY FROM: heat sources. ignition sources.  
Prohibitions on mixed storage : KEEP SUBSTANCE AWAY FROM: oxidizing agents. strong acids. (strong) bases. amines. halogens.  
Storage area : Store in a cool area. Store in a dry area. Ventilation at floor level. Fireproof storeroom. Provide for an automatic sprinkler system. Provide for a tub to collect spills. Provide the tank with earthing. May be stored under nitrogen. Meet the legal requirements.  
Special rules on packaging : SPECIAL REQUIREMENTS: closing. with pressure relief valve. dry. clean. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.  
Packaging materials : SUITABLE MATERIAL: stainless steel. monel steel. carbon steel. copper. nickel. bronze. glass. Teflon. polyethylene. polypropylene. zinc. MATERIAL TO AVOID: steel with rubber inner lining. aluminium.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

| Isopropanol, 70% v/v (67-63-0)             |                                                                                                                |
|--------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| No additional information available        |                                                                                                                |
| Isopropyl Alcohol (2-Propanol) (67-63-0)   |                                                                                                                |
| USA - ACGIH - Occupational Exposure Limits |                                                                                                                |
| Local name                                 | 2-Propanol                                                                                                     |
| ACGIH OEL TWA [ppm]                        | 200 ppm                                                                                                        |
| ACGIH STEL (ppm)                           | 400 ppm                                                                                                        |
| Remark (ACGIH)                             | TLV® Basis: Eye & URT irr; CNS impair. Notations: A4 (Not classifiable as a Human Carcinogen); BEI             |
| Regulatory reference                       | ACGIH 2021                                                                                                     |
| USA - ACGIH - Biological Exposure Indices  |                                                                                                                |
| Local name                                 | 2-PROPANOL                                                                                                     |
| Biological Exposure Indices (BEI)          | 40 mg/l Parameter: Acetone - Medium: urine - Sampling time: End of shift at end of workweek - Notations: B, Ns |
| Regulatory reference                       | ACGIH 2021                                                                                                     |
| USA - OSHA - Occupational Exposure Limits  |                                                                                                                |
| Local name                                 | Isopropyl alcohol                                                                                              |
| OSHA PEL (TWA) [1]                         | 980 mg/m³                                                                                                      |
| OSHA PEL (TWA) [2]                         | 400 ppm                                                                                                        |
| Regulatory reference (US-OSHA)             | OSHA Annotated Table Z-1                                                                                       |
| USA - IDLH - Occupational Exposure Limits  |                                                                                                                |
| IDLH [ppm]                                 | 2000 ppm                                                                                                       |
| USA - NIOSH - Occupational Exposure Limits |                                                                                                                |
| NIOSH REL (TWA)                            | 980 mg/m³                                                                                                      |
| NIOSH REL TWA [ppm]                        | 400 ppm                                                                                                        |
| NIOSH REL (STEL)                           | 1225 mg/m³                                                                                                     |
| NIOSH REL STEL [ppm]                       | 500 ppm                                                                                                        |
| Water (7732-18-5)                          |                                                                                                                |
| No additional information available        |                                                                                                                |

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

# Isopropanol, 70% v/v

## Safety Data Sheet

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

### 8.3. Individual protection measures/Personal protective equipment

#### Personal protective equipment:

Safety glasses. Gloves. Wear fire/flammable resistant/retardant clothing. Chemical resistant apron.

#### Materials for protective clothing:

GIVE EXCELLENT RESISTANCE: butyl rubber. nitrile rubber. viton. polyethylene/ethylenevinylalcohol. GIVE GOOD RESISTANCE: neoprene. chloroprene rubber. GIVE LESS RESISTANCE: PVC. neoprene/natural rubber. GIVE POOR RESISTANCE: natural rubber. polyethylene. PVA

#### Hand protection:

Gloves

#### Eye protection:

Safety glasses

#### Skin and body protection:

Fireproof clothing

#### Respiratory protection:

Full face mask with filter type A at conc. in air > exposure limit

#### Personal protective equipment symbol(s):



## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|                                               |                                             |
|-----------------------------------------------|---------------------------------------------|
| Physical state                                | : Liquid                                    |
| Appearance                                    | : Liquid.                                   |
| Color                                         | : Colourless                                |
| Odor                                          | : Alcohol odour Stuffy odour Mild odour     |
| Odor threshold                                | : 3 – 610 ppm<br>8 – 1499 mg/m <sup>3</sup> |
| pH                                            | : No data available in the literature       |
| Melting point                                 | : -89 °C                                    |
| Freezing point                                | : No data available                         |
| Boiling point                                 | : 82 °C (1013 hPa)                          |
| Critical temperature                          | : 235 °C                                    |
| Critical pressure                             | : 47600 hPa                                 |
| Flash point                                   | : 12 °C                                     |
| Relative evaporation rate (butyl acetate=1)   | : 2.3                                       |
| Relative evaporation rate (ether=1)           | : 21                                        |
| Flammability (solid, gas)                     | : No data available                         |
| Vapor pressure                                | : 44 hPa (20 °C)                            |
| Vapor pressure at 50 °C                       | : 229 hPa                                   |
| Relative vapor density at 20 °C               | : 2.1                                       |
| Relative density                              | : 0.88                                      |
| Relative density of saturated gas/air mixture | : 1.05                                      |
| Density                                       | : 0.88 g/ml                                 |
| Molecular mass                                | : 60.1 g/mol                                |

# Isopropanol, 70% v/v

## Safety Data Sheet

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

|                                       |                                                                                                                                                                                                           |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Solubility                            | : Soluble in water. Soluble in ethanol. Soluble in ether. Soluble in acetone. Soluble in oils/fats. Soluble in chloroform.<br>Water: miscible<br>Ethanol: complete<br>Ether: complete<br>Acetone: soluble |
| Log Pow                               | : 0.05 (Weight of evidence approach, 25 °C)                                                                                                                                                               |
| Auto-ignition temperature             | : 399 °C                                                                                                                                                                                                  |
| Decomposition temperature             | : No data available in the literature                                                                                                                                                                     |
| No data availableViscosity, kinematic | : 2.532 mm <sup>2</sup> /s (25 °C)                                                                                                                                                                        |
| Viscosity, dynamic                    | : 2.1 mPa·s (25 °C)                                                                                                                                                                                       |
| Explosion limits                      | : 2 – 13 vol %<br>50 – 335 g/m <sup>3</sup><br>Lower explosive limit (LEL): 2 vol %<br>Upper explosive limit (UEL): 13 vol %                                                                              |
| Explosive properties                  | : No data available                                                                                                                                                                                       |
| Oxidizing properties                  | : No data available                                                                                                                                                                                       |

### 9.2. Other information

|                          |                                                         |
|--------------------------|---------------------------------------------------------|
| Minimum ignition energy  | : 0.65 mJ                                               |
| Specific conductivity    | : 350000000 pS/m (25 °C)                                |
| Saturation concentration | : 106 g/m <sup>3</sup>                                  |
| VOC content              | : 877 g/l                                               |
| Other properties         | : Gas/vapour heavier than air at 20°C. Clear. Volatile. |

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Violent to explosive reaction with (strong) oxidizers. Prolonged storage/in large quantities: may form peroxides.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

Direct sunlight. Heat. High temperature. Incompatible materials. Open flame. Sparks.

### 10.5. Incompatible materials

May react violently with alkalis. May react violently with acids.

### 10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide.

## 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 |

| Isopropanol, 70% v/v (67-63-0) |                                                                                            |
|--------------------------------|--------------------------------------------------------------------------------------------|
| LD50 oral rat                  | 5840 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Experimental value)        |
| LD50 dermal rabbit             | 16400 ml/kg (Equivalent or similar to OECD 402, 24 h, Rabbit, Experimental value)          |
| LC50 Inhalation - Rat [ppm]    | > 10000 ppm (Equivalent or similar to OECD 403, 6 h, Rat, Male/female, Experimental value) |
| ATE US (oral)                  | 5045 mg/kg body weight                                                                     |
| ATE US (dermal)                | 12870 mg/kg body weight                                                                    |
| ATE US (vapors)                | 73 mg/l/4h                                                                                 |
| ATE US (dust, mist)            | 73 mg/l/4h                                                                                 |

# Isopropanol, 70% v/v

## Safety Data Sheet

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

| Isopropyl Alcohol (2-Propanol) (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                       | 12882 mg/kg body weight (Equivalent or similar to OECD 402, 24 h, Rabbit, Experimental value, Converted 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)                          | 12882 mg/kg body weight                                                                                                           |

| Water (7732-18-5) |                         |
|-------------------|-------------------------|
| LD50 oral rat     | ≥ 90000 mg/kg           |
| ATE US (oral)     | 90000 mg/kg body weight |

|                                   |                                                                             |
|-----------------------------------|-----------------------------------------------------------------------------|
| Skin corrosion/irritation         | : Not classified<br>pH: No data available in the literature                 |
| Serious eye damage/irritation     | : Causes serious eye irritation.<br>pH: No data available in the literature |
| Respiratory or skin sensitization | : Not classified                                                            |
| Germ cell mutagenicity            | : Not classified                                                            |
| Carcinogenicity                   | : Not classified                                                            |
| Reproductive toxicity             | : Not classified                                                            |
| STOT-single exposure              | : May cause respiratory irritation.                                         |

| Isopropyl Alcohol (2-Propanol) (67-63-0) |                                   |
|------------------------------------------|-----------------------------------|
| STOT-single exposure                     | May cause respiratory irritation. |

|                                                     |                                                                                                                                                                                                                                                                                                                        |
|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| STOT-repeated exposure                              | : Not classified                                                                                                                                                                                                                                                                                                       |
| Aspiration hazard                                   | : Not classified                                                                                                                                                                                                                                                                                                       |
| Viscosity, kinematic                                | : 2.532 mm²/s (25 °C)                                                                                                                                                                                                                                                                                                  |
| Likely routes of exposure                           | : Inhalation. Skin and eye contact.                                                                                                                                                                                                                                                                                    |
| Potential Adverse human health effects and symptoms | : Non-toxic if swallowed (LD50 oral, rat > 5000 mg/kg). Non-toxic in contact with skin (LD50 skin > 5000 mg/kg). Not irritant to skin. May cause drowsiness or dizziness. Practically non-toxic by inhalation (LC50 inh, rat > 20 mg/l/4h). Causes serious eye irritation.                                             |
| Symptoms/effects after inhalation                   | : EXPOSURE TO HIGH CONCENTRATIONS: Coughing. Dry/sore throat. Central nervous system depression. Dizziness. Headache. Narcosis.                                                                                                                                                                                        |
| Symptoms/effects after skin contact                 | : Dry skin.                                                                                                                                                                                                                                                                                                            |
| Symptoms/effects after eye contact                  | : Irritation of the eye tissue.                                                                                                                                                                                                                                                                                        |
| Symptoms/effects after ingestion                    | : AFTER ABSORPTION OF LARGE QUANTITIES: Central nervous system depression. Headache. Dilation of the blood vessels. Low arterial pressure. Nausea. Vomiting. Abdominal pain. Disturbed motor response. Disturbances of consciousness. FOLLOWING SYMPTOMS MAY APPEAR LATER: Body temperature fall. Slowing respiration. |
| Chronic symptoms                                    | : ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Red skin. Dry skin. Itching. Cracking of the skin. Skin rash/inflammation. Impaired memory.                                                                                                                                                                                 |

## SECTION 12: Ecological information

### 12.1. Toxicity

|                   |                                                                                                                                                                           |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ecology - general | : Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008.                                                              |
| Ecology - air     | : Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014). Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009). |
| Ecology - water   | : Not harmful to crustacea. Not harmful to fishes. Groundwater pollutant. No inhibition of activated sludge. Not harmful to algae. Not harmful to bacteria.               |

| Isopropanol, 70% v/v (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) |

# Isopropanol, 70% v/v

## Safety Data Sheet

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

| Isopropyl Alcohol (2-Propanol) (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

| Isopropanol, 70% v/v (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 <sub>2</sub> /g substance                                                                               |
| Chemical oxygen demand (COD)    | 2.23 g O <sub>2</sub> /g substance                                                                               |
| ThOD                            | 2.4 g O <sub>2</sub> /g substance                                                                                |

| Isopropyl Alcohol (2-Propanol) (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 <sub>2</sub> /g substance                                                                               |
| Chemical oxygen demand (COD)             | 2.23 g O <sub>2</sub> /g substance                                                                               |
| ThOD                                     | 2.4 g O <sub>2</sub> /g substance                                                                                |

| Water (7732-18-5)             |                  |
|-------------------------------|------------------|
| Persistence and degradability | Not established. |

### 12.3. Bioaccumulative potential

| Isopropanol, 70% v/v (67-63-0) |                                                  |
|--------------------------------|--------------------------------------------------|
| Log Pow                        | 0.05 (Weight of evidence approach, 25 °C)        |
| Bioaccumulative potential      | Low potential for bioaccumulation (Log Kow < 4). |

| Isopropyl Alcohol (2-Propanol) (67-63-0) |                                                  |
|------------------------------------------|--------------------------------------------------|
| Log Pow                                  | 0.05 (Weight of evidence approach, 25 °C)        |
| Bioaccumulative potential                | Low potential for bioaccumulation (Log Kow < 4). |

| Water (7732-18-5)         |                  |
|---------------------------|------------------|
| Bioaccumulative potential | Not established. |

### 12.4. Mobility in soil

| Isopropanol, 70% v/v (67-63-0) |                                                       |
|--------------------------------|-------------------------------------------------------|
| Surface tension                | 0.021 N/m (25 °C)                                     |
| Ecology - soil                 | No (test)data on mobility of the substance available. |

| Isopropyl Alcohol (2-Propanol) (67-63-0) |                                        |
|------------------------------------------|----------------------------------------|
| Surface tension                          | No data available (test not performed) |
| Ecology - soil                           | Highly mobile in soil.                 |

### 12.5. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Regional legislation (waste)   | : LWCA (the Netherlands): KGA category 03.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Waste disposal recommendations | : Do not discharge into drains or the environment. Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Recycle by distillation. Remove to an authorized waste incinerator for solvents with energy recovery. Obtain the consent of pollution control authorities before discharging to wastewater treatment plants. |

# Isopropanol, 70% v/v

## Safety Data Sheet

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

Additional information : Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.

### 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  
Transport hazard class(es) (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  
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.  
Other information : No supplementary information available.

#### Transport by sea (IMDG)

UN-No. (IMDG) : 1219  
Proper Shipping Name (IMDG) : Isopropanol (isopropyl alcohol)  
Class (IMDG) : 3 - Flammable liquids  
Packing group (IMDG) : II - substances presenting medium danger  
EmS-No. (1) : F-E  
EmS-No. (2) : S-D

#### Air transport (IATA/ICAO)

UN-No. (IATA) : 1219  
Proper Shipping Name (IATA) : Isopropanol  
Class (IATA) : 3 - Flammable Liquids  
Packing group (IATA) : II - Medium Danger

# Isopropanol, 70% v/v

## Safety Data Sheet

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

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

##### Isopropanol, 70% v/v (67-63-0)

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 as Active, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Isopropyl Alcohol (2-Propanol)

CAS-No. 67-63-0

70%

Water

CAS-No. 7732-18-5

30%

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 (2-Propanol)

CAS-No. 67-63-0

70%

##### Isopropyl Alcohol (2-Propanol) (67-63-0)

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)

#### 15.2. International regulations

##### CANADA

##### Water (7732-18-5)

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

### SECTION 16: Other information

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

Revision date : 08/11/2021

Full text of H- and EUH-statements: see section 16:

|      |                                   |
|------|-----------------------------------|
| H225 | Highly flammable liquid and vapor |
| H319 | Causes serious eye irritation     |
| H335 | May cause respiratory irritation  |

NFPA health hazard

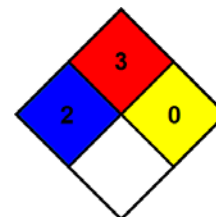
: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard

: 3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature conditions.

NFPA reactivity

: 0 - Material that in themselves are normally stable, even under fire conditions.



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.

Personal protection

: H

H - Splash goggles, Gloves, Synthetic apron, Vapor respirator

# Isopropanol, 70% v/v

## Safety Data Sheet

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

---

*Information in this SDS is from available published sources and is believed to be accurate. No warranty, express or implied, is made and LabChem Inc assumes no liability resulting from the use of this SDS. The user must determine suitability of this information for his application.*