



Preparing for the New Era of Laboratories

# MATERIAL SAFETY DATA SHEET (MSDS)

According to regulation (EU) no.1907/2006

## **ISO-PROPYL ALCOHOL 99,5% AR**

PRODUCT CODE : B-3045

CAS No : 67-63-0

FORMULA :  $(\text{CH}_3)_2\text{CHOH}$

UN No : 1219

website : [www.labotiq.net](http://www.labotiq.net)

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MSDS Number : 0197

Date : Aug 26<sup>th</sup>, 2024

Version : 1.0

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

- 1.1 Product Name** : ISO-PROPYL ALCOHOL 99,5%  
**Synonyms** : 2-Propanol, Isopropanol, IPA  
**CAS No.** : 67-63-0  
**HS Code** : 2905 12 20  
**Chemical Formula** :  $(\text{CH}_3)_2\text{CHOH}$   
**Molecular Weight** : 60.10 g/mol  
**Product Code** : B-3045  
**Brand** : Labotiq
- 1.2 Manufacturer** : Labotiq  
**Address** : Jl.Terapi Raya AD2-Bumi Menteng Asri Bogor, Jawa Barat Indonesia – 16111  
**Website** : [www.labotiq.net](http://www.labotiq.net)  
**Email** : [labotiq.id@gmail.com](mailto:labotiq.id@gmail.com)  
**For information** : Phone : (+62-251) 839110, 8311662, Fax : (+62-251) 83135710  
**Emergency number** : +6281316894650
- 1.3 Application** : Laboratory chemicals, Manufacture of substances, General Chemical reagent

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification according to Regulation (EC) No 1272/2008

Flammable liquids, Category 2	H225
Serious eye damage/eye irritation, Category 2	H319
Specific target organ toxicity — Single exposure, Category 3, Narcosis	H336

For the full text of the H-Statements mentioned in this Section, see Section 16

#### 2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word

Danger

Hazard statement(s)

H225 -

Highly flammable liquid and vapour.

H319 -

Causes serious eye irritation.

H336 -

May cause drowsiness or dizziness.

Precautionary statement(s)

P210 -

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

P261 -

Avoid breathing vapours, dust, fume, gas.

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P305+P351+P338 -

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Supplemental Hazard Statements

none

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Synonyms : 2-Propanol, Isopropanol, IPA  
 Formula : (CH<sub>3</sub>)<sub>2</sub>CHOH  
 Molecular weight : 60.10 g/mol  
 CAS-No. : 67-63-0  
 EC-No. : 200-661-7  
 Index-No. : 603-117-00-0

### 3.2 Mixture

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Classification	Concentration
2-Propanol CAS-No. 67-63-0 EC-No. 200-661-7 Index-No. 603-117-00-0	Flam. Liq. 2; Eye Irrit. 2; STOT SE 3; H225, H319, H336	<=100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2 Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation : May cause drowsiness or dizziness.

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Symptoms/effects after eye contact : Causes serious eye irritation.

**4.3 Indication of any immediate medical attention and special treatment needed**

Treat symptomatically.

**SECTION 5: Firefighting measures****5.1 Extinguishing media**

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

Unsuitable extinguishing media : Do not use extinguishing media containing water.

**5.2 Special hazards arising from the substance or mixture**

Fire hazard : Highly flammable liquid and vapour.

Explosion hazard : May form flammable/explosive vapour-air mixture.

**5.3 Advice for firefighters**

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

**5.4 Further information**

Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8

**6.2 Environmental precautions**

Do not let product enter drains. Risk of explosion.

**6.3 Methods and materials for containment and cleaning up**

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb® ). Dispose of properly. Clean up affected area.

**6.4 Reference to other sections**

For disposal see section 13.

**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

Advice on safe handling

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

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Hygiene measures

Change contaminated clothing. Wash hands after working with substance. For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**

Storage conditions

Protected from light. Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition. Recommended storage temperature see product label.

Storage class

Storage class (TRGS 510): 3: Flammable liquids

**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****8.2 Exposure controls****Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment****Eye/face protection**

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

**Full contact**

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatrill® (KCL 740, Size M)

**Splash contact**

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatrill® (KCL 740, Size M)

**Body Protection**

Impervious clothing, Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

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### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use (EN 143) respirator cartridges as a backup to engineering controls. If th full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance	Form: liquid
	Colour: colourless
Odour	alcohol-like
Odour Threshold	1 ppm
pH	at 20 °C neutral
Melting point/freezingpoint	Melting point/range: -89,5 °C - lit.
Initial boiling point and boiling range	82 °C - lit.
Flash point	12,0 °C - closed cup
Evaporation rate	3,0
Flammability (solid, gas)	No data available
Upper/lower flammability or	Upper explosion limit: 13,4 %(V)
	Lower explosion limit: 2 %(V)
explosive limits	No data available
Vapour pressure	43 hPa at 20 °C
Vapour density	2,07
Relative density	0,785 g/cm <sup>3</sup> at 25 °C - lit.
Water solubility	at 20 °C soluble
Partition coefficient: noctanol/water	log Pow: 0,05 - Bioaccumulation is not expected.
Auto-ignition temperature	425,0 °C
Decomposition temperature	No data available
Viscosity	Viscosity, dynamic: 2,2 mPa.s at 20 °C
Explosive properties	No data available
Oxidizing properties	none

### 9.2 Other safety information

Minimum ignition energy	0,65 mJ
Conductivity	< 0,1 µS/cm
Surface tension	20,8 mN/m at 25,0 °C
Relative vapor density	2,07

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Vapors may form explosive mixture with air.

### 10.2 Chemical stability

Reacts with air to form peroxides.

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

Stable under recommended storage conditions.

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### **10.3 Possibility of hazardous reactions**

No data available

### **10.4 Conditions to avoid**

Warming.

### **10.5 Incompatible materials**

rubber, various plastics, oils

### **10.6 Hazardous decomposition products**

In the event of fire: see section 5

## **SECTION 11: Toxicological information**

### **11.1 Information on toxicological effects**

#### **Acute toxicity**

LD50 Oral - Rat - 5.840 mg/kg (OECD Test Guideline 401)

LC50 Inhalation - Rat - male and female - 4 h - 37,5 mg/l (OECD Test Guideline 403)

LD50 Dermal - Rabbit - 12.800 mg/kg

Remarks: (RTECS)

#### **Skin corrosion/irritation**

Skin - Rabbit

Result: No skin irritation - 4 h (OECD Test Guideline 404)

#### **Serious eye damage/eye irritation**

Eyes - Rabbit

Result: Eye irritation (OECD Test Guideline 405)

#### **Respiratory or skin sensitisation**

Buehler Test - Guinea pig

Result: negative (OECD Test Guideline 406)

#### **Germ cell mutagenicity**

Test Type: Ames test Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Test system: Chinese hamster ovary cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 476

Result: negative

Test Type: In vivo micronucleus test

Species: Mouse Cell type: Bone marrow

Application Route: Intraperitoneal injection

Method: OECD Test Guideline 474

Result: negative

#### **Carcinogenicity**

This product is or contains a component that is not classifiable as to its classification.(2-Propanol) (2-Propanol)

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (2-Propanol)

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**Reproductive toxicity**

No data available(2-Propanol)

**Specific target organ toxicity - single exposure**

Inhalation, Oral - May cause drowsiness or dizziness. - Central nervous system

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

**Specific target organ toxicity - repeated exposure**

No data available(2-Propanol)

**Aspiration hazard**

No data available(2-Propanol)

**Additional Information**

RTECS: NT8050000

Central nervous system depression, prolonged or repeated exposure can cause:, Nausea, Headache, Vomiting, narcosis, Drowsiness, Overexposure may cause mild, reversible liver effects., Aspiration may lead to:, Lung edema, Pneumonia To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. After absorption: Headache Dizziness inebriation

Unconsciousness narcosis After uptake of large quantities: Coma Handle in accordance with good industrial hygiene and safety practice. Kidney - Irregularities - Based on Human Evidence

**SECTION 12: Ecological information****12.1 Toxicity**

Toxicity to fish flow-through test

LC50 - Pimephales promelas (fathead minnow) - 9.640 mg/l - 96 h (OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates

EC50 - Daphnia magna (Water flea) - 13.299 mg/l - 48 h

Remarks: (IUCLID)

Toxicity to algae

IC50 - Desmodesmus subspicatus (green algae) - &gt; 1.000 mg/l - 72 h

Remarks: (IUCLID)

Toxicity to bacteria

EC5 - Pseudomonas putida - 1.050 mg/l - 16 h Remarks: (Lit.)

**12.2 Persistence and degradability**

Biodegradability aerobic - Exposure time 5 d

Result: 53 % - Readily biodegradable. (Directive 67/548/EEC, Annex V, C.6)

Theoretical oxygen demand 2.400 mg/g

Remarks: (Lit.)

Ratio BOD/ThBOD 49 %

Remarks: (IUCLID)

**12.3 Bioaccumulative potential**

No bioaccumulation is to be expected (log Pow &lt;= 4).

**12.4 Mobility in soil**

No data available



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**12.5 Results of PBT and vPvB assessment**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**12.6 Other adverse effects**

No data available

**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber b highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**

Dispose of as unused product.

**SECTION 14: Transport information****14.1 UN number**

ADR/RID: 1219

IMDG: 1219

IATA: 1219

**14.2 UN proper shipping name**

ADR/RID: ISOPROPANOL

IMDG: ISOPROPANOL

IATA: ISOPROPANOL

**14.3 Transport hazard class(es)**

ADR/RID: 3

IMDG: 3

IATA: 3

**14.4 Packaging group**

ADR/RID: II

IMDG: II

IATA: II

**14.5 Environmental hazards**

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

**14.6 Special precautions for user****Further information**

No data available

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

**15.2 Chemical safety assessment**

For this product a chemical safety assessment was not carried out

**SECTION 16: Other information****Full text of H-Statements referred to under sections 2 and 3.**

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

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**National Fire Protection Association (U.S.A.):**

Health: 1

Flammability: 3

Reactivity: 0

**Further information**

*The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our 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. Labotiq shall not be held liable for any damage resulting from handling or from contact with the above product.*

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Revision Date : August 26, 2024