

Material Safety Data Sheets (MSDS)

iso-Propyl Alcohol

Identification of Product

Chemical Code: CHE-I5

Chemical Name: iso-Propyl Alcohol

Chemical Grade: AR

Chemical Formula: C_3H_8O

Chemical Weight: 60,10 g/mol

CAS No: 67-63-0

Chemical Synonyms: Sec-Propyl Alcohol

Isopropyl Alcohol

Isopropanol

2-Propanol

Hazards Identification

REACH No: No Data Available

Signal Word: Danger

Supplemental Hazard Information:

Additional Hazard Information: 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.



Hazards statements

H225 - Highly flammable liquid and vapour.

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.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P370 + P378 - In case of fire: Use dry powder or dry sand to extinguish.

P403 + P235 - Store in a well-ventilated place. Keep cool.

Composition of Chemical

Chemical Formula: C_3H_8O

EC No 1272/2008: No Data Available

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.

If: Skin Contact: Wash off with soap and plenty of water. Consult a physician.

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

If: Swallowed: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Important Symptoms: The most important known symptoms and effects are described in the labeling section.

Immediate Medical Attention: No Data Available

Firefighting Measures

Extinguishing Media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Hazards Arising: No Data Available

Advice for Firefighters: Wear self-contained breathing apparatus for firefighting if necessary.

Info for Firefighting: Use water spray to cool unopened containers.

Accidental Release Measures

Personal Precautions: Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

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

Method for Containment: Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations.

Handling and Storage

Personal Precautions: Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

Environmental Precautions: Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Handle and store under inert gas. Hygroscopic.

Exposure Controls | Personal Protection

Derived No Effect Level (DNEL)

Workers | Application Area | Exposure Routes | Health Effect | Value

No Data Available

Consumers | Application Area | Exposure Routes | Health Effect | Value

No Data Available

Predicted No Effect Concentration (PNEC)

No Data Available

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

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: 0,4 mm

Break through time: 480 min

Material tested: Camatril® (KCL 730 / Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,2 mm

Break through time: 60 min

Material tested: Dermatril® P (KCL 743 / Size M)

data source: KCL GmbH, D-36124 ,test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

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.

Respiratory Protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Physical and Chemical Properties

Appearance: Colourless liquid

Odour: Alcohol-like

Odour Threshold: No Data Available

pH: No Data Available

Melting Point: Melting point/range: -89,5 °C

Boiling Point: 82 °C

Flash Point: 12,0 °C - closed cup

Evaporation: 3,0

Flammability: No Data Available

Upper/Lower Flammability or Explosive Limits: Upper explosion limit: 12,7 %(V) Lower explosion limit: 2 %(V)

Vapour pressure: 43,2 hPa at 20,0 °C 58,7 hPa at 25,0 °C

Vapour density: No Data Available

Relative density: 0,785 g/mL at 25 °C

Water solubility: completely soluble

Partition Coefficient: log Pow: 0,05

Auto-ignition Temperature: 425,0 °C

Decomposition Temperature: No Data Available

Viscosity: No Data Available

Explosive properties: No Data Available

Oxidizing properties: No Data Available

Other Safety Info: Surface tension 20,8 mN/m at 25,0 °C

Stability and Reactivity

Reactivity: No Data Available

Chemical Stability: Stable under recommended storage conditions.

Possibility of hazardous reactions: No Data Available

Conditions to Avoid: Heat, flames and sparks.

Incompatible Materials: Oxidizing agents, Acid anhydrides, Aluminium, Halogenated compounds, Acids.

Hazardous Decomposition Products: Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - No data available

Toxicological Information

Acute Toxicity: LD50 Oral - Rat - 5.045 mg/kg

Remarks: Behavioral: Altered sleep time (including change in righting reflex). Behavioral: Somnolence (general depressed activity).

LC50 Inhalation - Rat - 8 h - 16000 ppm

LD50 Dermal - Rabbit - 12.800 mg/kg

Skin Corrosion/Irritation: Skin - Rabbit

Result: Mild skin irritation

Serious Eye damage | Eye Irritation: Eyes - Rabbit

Result: Eye irritation - 24 h

Cell Mutagenicity: No Data Available

Carcinogenicity: This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity: No Data Available

Specific Target Organ Toxicity - Single Exposure: Inhalation, Oral - May cause drowsiness or dizziness.

Specific Target Organ Toxicity - Repeated Exposure: No Data Available

Aspiration Hazard: No Data Available

Ecological Information

Ecological Toxicity: Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 9.640,00 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates - EC50 - Daphnia magna (Water flea) - 5.102,00 mg/l - 24 h

Immobilization EC50 - Daphnia magna (Water flea) - 6.851 mg/l - 24 h

Toxicity to algae EC50 - Desmodesmus subspicatus (green algae) - > 2.000,00 mg/l - 72 h

EC50 - Algae - > 1.000,00 mg/l - 24 h

Ecological Persistence and degradability: No Data Available

Bioaccumulative Potential: No bio accumulation is to be expected (log Pow <= 4).

Mobility in Soil: No Data Available

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.

Other Adverse Effect: No Data Available

Disposal Considerations

Waste Treatment Methods: Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

Transport Information

UN Number: ADR/RID: 1219

IMDG: 1219

IATA: 1219

UN Shipping Hazard: ADR/RID: ISOPROPANOL

IMDG: ISOPROPANOL

IATA: Isopropanol

Transport Hazard Class: ADR/RID: 3

IMDG: 3

IATA: 3

Packaging Group: ADR/RID: II

IMDG: II

IATA: II

Environmental Hazards: ADR/RID: no

IMDG Marine pollutant: no

IATA: no

Special Precautions: No Data Available

Regulatory Information

Safety, Health and environmental regulations: This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Chemical Safety Assessment: For this product a chemical safety assessment was not carried out.

Additional Info: 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 oedema, Pneumonia. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Kidney - Irregularities - Based on Human Evidence.

Disclaimer

The information stated above is considered to be correct, but does not claim to be inclusive and shall only be used as a guideline. The information provided by this document is confirmed by our continuous updating of knowledge and adheres to the products appropriate safety precautions. It does not represent any guarantee of the product's properties. RLS Chemicals and its Associates shall not be held accountable for any damage's consequent of handling the above product.
