

Safety Data Sheet

Isopropyl Alcohol, Krystal Pure

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Isopropyl Alcohol, Krystal Pure

Synonyms/Generic Names: IPA, Isopropanol, 2-propanol, sec-Propyl alcohol

Product Number: 2842

Product Use: Industrial, Manufacturing or Laboratory use

Manufacturer: Columbus Chemical Industries, Inc. N4335 Temkin Rd. Columbus, WI. 53925

For More Information: 920-623-2140 (Monday-Friday 8:00-4:30) www.columbuschemical.com

In Case of Emergency Call: CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

2. HAZARDS IDENTIFICATION

Hazards Not Otherwise Classified (HNOC): Not Available

Specific Target Organ Toxicity (STOT): Eyes, skin, respiratory system

Signal Word: Danger

Pictograms:



GHS Classification:

| Flammable liquids | Category 2 |
|--|-------------|
| Skin irritation | Category 3 |
| Eye irritation | Category 2A |
| Specific target organ toxicity-single exposure; narcotic effects | Category 3 |

GHS Label Elements, including precautionary statements:

Hazard Statements:

| H225 | Highly flammable liquid and vapor |
|------|------------------------------------|
| H316 | Causes mild skin irritation. |
| H319 | Causes serious eye irritation. |
| H336 | May cause drowsiness or dizziness. |

Precautionary Statements:

| P210 | Keep away from heat/sparks/open flames/hot surfaces. No smoking. | | | |
|----------------|---|--|--|--|
| P233 | Keep container tightly closed. | | | |
| P240 | Ground/Bond container and receiving equipment. | | | |
| P241 | Use explosion-proof electrical/ventilating/lighting/equipment. | | | |
| P242 | Use only non-sparking tools. | | | |
| P243 | Take precautionary measures against static discharge. | | | |
| P261 | Avoid breathing dust/fume/gas/mist/vapors/spray. | | | |
| P264 | Wash hands thoroughly after handling. | | | |
| P271 | Use only outdoors or in a well-ventilated area. | | | |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. | | | |
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse | | | |
| | skin with water/shower. | | | |
| P304+P340 | IF INHALED: Remove person to fresh air and keep comfortable for | | | |
| | breathing. | | | |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove | | | |
| | contact lenses, if present and easy to do. Continue rinsing. | | | |
| P312 | Call a POISON CENTER/doctor/physician if you feel unwell. | | | |
| P332+P313 | If skin irritation occurs: Get medical advice/attention. | | | |
| P337+P313 | If eye irritation persists: Get medical advice/attention. | | | |
| P370+P378 | In case of fire: Use appropriate media to extinguish. | | | |
| P403+P233+P235 | Store in a well-ventilated place. Keep container tightly closed. Keep cool. | | | |
| P405 | Store locked up. | | | |
| P501 | Dispose of contents/container in accordance with local regulations. | | | |
| | | | | |

Potential Health Effects

| Eyes | Causes eye irritation. |
|------------|--|
| Inhalation | May be harmful if inhaled. Causes respiratory tract irritation. Vapors may cause drowsiness and dizziness. Can cause irritation of mucous membranes and central nervous system depression. |
| Skin | May be harmful if absorbed through skin. Causes skin irritation. |
| Ingestion | May be harmful if swallowed. |

NFPA Ratings

| Health | 1 |
|-----------------|---------------|
| Flammability | 3 |
| Reactivity | 0 |
| Specific hazard | Not Available |

| HMIS Ratings | |
|--------------|---|
| Health | 2 |
| Fire | 3 |
| Reactivity | 0 |

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component | Weight % | CAS # | EINECS# / ELINCS# | Formula | Molecular Weight |
|-------------------|----------|---------|----------------------|---------------------------------|---------------------|
| Isopropyl Alcohol | >99 | 67-63-0 | 200-661-7 | C ₃ H ₈ O | 60.10 g/mol |

4. FIRST-AID MEASURES

| Eyes | Rinse with plenty of water for at least 15 minutes and seek medical attention. | | |
|------------|---|--|--|
| Inhalation | Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not | | |
| | breathing, give artificial respiration. Get medical attention. | | |
| Skin | Flush with plenty of water for at least 15 minutes while removing contaminated clothing and | | |
| | wash using soap. Get medical attention. | | |

| Ingestion | Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If | | | | |
|--|---|--|--|--|--|
| conscious, wash out mouth with water. Get medical attention. | | | | | |

5. FIREFIGHTING MEASURES

| Suitable (and unsuitable) extinguishing media | Flammable in the presence of a source of ignition when the temperature is above the flash point. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Use appropriate media for adjacent fire. Cool containers with water. |
|---|---|
| Special protective equipment and precautions for firefighters | Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots. Use water spray to cool fire-exposed containers and disperse vapors. Containers may rupture in the heat of the fire. Do not use direct water stream, may spread the fire. |
| Specific hazards arising from the chemical | Emits toxic fumes (carbon oxides) under fire conditions. Vapors can travel to a source of ignition and flash back. Containers may explode in a fire. Cool containers from a distance using water spray. Flames may be invisible. (See also Stability and Reactivity section). |

6. ACCIDENTAL RELEASE MEASURES

| Personal precautions, protective equipment and emergency procedures | See section 8 for recommendations on the use of personal protective equipment. |
|---|---|
| Environmental precautions | Do not let product enter drains. Any release to the environment may be subject to federal/national or local reporting requirements. |
| Methods and materials for containment and cleaning up | Absorb spill with vermiculite or other noncombustible absorbent material, then place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with local regulations. |

7. HANDLING AND STORAGE

Precautions for safe handling

Use with adequate ventilation and grounding. Wash thoroughly after using. Keep container closed when not in use. See section 8 for recommendations on the use of personal protective equipment. Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Use explosion-proof equipment. Take measures to prevent the buildup of electrostatic charge.

Conditions for safe storage, including any incompatibilities

Store in tightly closed, original containers in a cool, dry, well-ventilated area. Do not store with strong oxidizing agents, strong acids, peroxides, aldehydes, halogens, ammonia, acid anhydrides or alkali metals. Keep away from incompatible materials (see section 10 for incompatibilities).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls: Appropriate grounding of containers.

| Component | Exposure Limits | Basis | Entity |
|-------------------|----------------------------------|-------|--------------------------------------|
| Isopropyl Alcohol | 200 ppm (492 mg/m ³) | TWA | ACGIH [®] TLVs [®] |
| | 400 ppm (984 mg/m ³) | STEL | ACGIH [®] TLVs [®] |

| 400 ppm (980 mg/r | m ³) TWA | OSHA PELs |
|-------------------|-------------------------|------------|
| 400 ppm (980 mg/r | m ³) TWA | NIOSH RELs |
| 500 ppm (1225 mg | g/m ³) STEL | NIOSH RELs |

TWA: Time Weighted Average over 8 hours of work. TLV: Threshold Limit Value over 8 hours of work.

REL: Recommended Exposure Limit

PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit during x minutes. IDLH: Immediately Dangerous to Life or Health

WEEL: Workplace Environmental Exposure Levels

CEIL: Ceiling

Personal Protection

| Eyes | Wear chemical safety glasses or goggles, and face shield. | |
|------------|--|--|
| Inhalation | Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an | |
| | approved respirator. | |
| Skin | Wear nitrile or rubber gloves, and full body covering. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. | |
| Other | Not Available | |

Other Recommendations

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling. Have supplies and equipment for neutralization and running water available.

9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance (physical state, color, etc.) | Clear, colorless liquid |
|---|-----------------------------|
| Odor | Mild odor |
| Odor threshold | Not Available |
| pH | Not Available |
| Melting point/freezing point | -88°C (-127°F) |
| Initial boiling point and boiling range | 82°C (180°F) |
| Flash point | 12°C (53°F) |
| Evaporation rate | Slower than ether |
| Flammability (solid, gas) | Flammable |
| Upper/lower flammability or explosive limit | LEL: 0.02 UEL: 0.127 |
| Vapor pressure | 32 |
| Vapor density | Heavier than air |
| Relative density | 0.78 to 0.80 |
| Solubility (ies) | Completely soluble in water |
| Partition coefficient: n-octanol/water | Not Available |
| Auto-ignition temperature | 399°C (750°F) |
| Decomposition temperature | Not Available |

10. STABILITY AND REACTIVITY

| Chemical Stability | Stable |
|------------------------------------|--|
| Possibility of Hazardous Reactions | Will not occur. |
| Conditions to Avoid | Keep away from heat, flame and sparks |
| Incompatible Materials | Acids, alkali metals, oxidizing agents, iron salts, potassium, |
| | aluminum. May attack plastics and rubber. |
| Hazardous Decomposition | Carbon oxides. |
| Products | |

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

| Addie Toxiolity | |
|-----------------|------------------------------|
| Skin | LD50 – rabbit – 12,800 mg/kg |
| Eyes | Not Available |
| Respiratory | Not Available |
| Ingestion | LD50 – mouse – 3,600 mg/kg |

Carcinogenicity

| Garennegennenty | |
|-----------------|---|
| IARC | 3-Group 3: Not classifiable as to its carcinogenicity to humans (Isopropyl Alcohol). |
| ACGIH | A4: Not classifiable as a human carcinogen (Isopropyl Alcohol). |
| NTP | No components of this product present at levels greater than or equal to 0.1% is identified |
| | as a known or anticipated carcinogen by NTP. |
| OSHA | No components of this product present at levels greater than or equal to 0.1% is identified |
| | as a carcinogen or potential carcinogen by OSHA. |

Signs & Symptoms of Exposure

| Skin | Burning, itching, redness. May be harmful if absorbed through skin. | |
|-------------|---|--|
| Eyes | Redness, excessive blinking and watering eyes. | |
| Respiratory | Coughing, wheezing, headache, disorientation, blurred vision, dizziness, fatigue or | |
| | nausea. | |
| Ingestion | Nausea, vomiting and central nervous system depression. | |

| Chronic Toxicity | May cause damage to the following organs: kidneys, liver, skin, central | |
|---------------------------------------|---|--|
| | nervous system. | |
| Teratogenicity | Not Available | |
| Mutagenicity | Not Available | |
| Embryotoxicity | Pre- and Post- implant mortality. | |
| Target Organ | Eyes, skin and respiratory system. | |
| Reproductive Toxicity | Not Available | |
| Respiratory/Skin Sensitization | Not Available | |

12. ECOLOGICAL INFORMATION

| Aquatic Vertebrate | Not Available |
|-------------------------------|---------------|
| Aquatic Invertebrate | Not Available |
| Terrestrial | Not Available |
| | |
| Persistence and Degradability | Not Available |
| Bioaccumulative Potential | Not Available |
| Mobility in Soil | Not Available |
| PBT and vPvB Assessment | Not Available |
| Other Adverse Effects | Not Available |

13. DISPOSAL CONSIDERATIONS

| Waste Product or Residues | Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product or residue. | |
|------------------------------|---|--|
| Product Containers | Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container. | |

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

14. TRANSPORTATION INFORMATION

| US DOT | UN1219, Isopropanol, 3, pg II |
|------------------|-------------------------------|
| TDG | UN1219, ISOPROPANOL, 3, PG II |
| IMDG | UN1219, ISOPROPANOL, 3, PG II |
| Marine Pollutant | No |
| IATA/ICAO | UN1219, Isopropanol, 3, pg II |

15. REGULATORY INFORMATION

| TSCA Inventory Status | All ingredients are listed on the Active TSCA inventory. |
|--|---|
| DSL/NDSL | All ingredients are listed on the DSL inventory. |
| California Proposition 65 | Not Listed |
| Massachusetts: Toxic or Hazardous | Listed: Isopropyl Alcohol |
| Substance List, Right to Know | |
| New Jersey: Right to Know Hazardous | Listed: Isopropyl Alcohol |
| Substance List | |
| Pennsylvania: Hazardous Substance List | Listed: 2-Propanol |
| Rhode Island: Hazardous Substance List | Listed: Isopropyl Alcohol |
| SARA 302 | No SARA Hazard |
| SARA 304 | No SARA Hazard |
| SARA 311 | Fire Hazard, Acute Health Hazard, Chronic Health Hazard |
| SARA 312 | Fire Hazard, Acute Health Hazard, Chronic Health Hazard |
| SARA 313 | No SARA Hazard |
| WHMIS Canada | Class B-2: Flammable and combustible liquid- Flammable |
| | liquid |
| | Class D-2B: Poisonous and infectious material- Other effects- |
| | Toxic |

16. OTHER INFORMATION

| Revision | Date |
|------------|------------|
| Revision 1 | 07/13/2011 |
| Revision 2 | 10/17/2013 |
| Revision 3 | 01/14/2015 |
| Revision 4 | 12/20/2017 |
| Revision 5 | 02/22/2022 |

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