

Safety Data Sheet

Ethyl Alcohol, 80% (v/v)

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Ethyl Alcohol, 80% (v/v)

Synonyms/Generic Names: Ethanol, grain alcohol, EtOH

Product Number: 8602

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

Hazard Not Otherwise Classified (HNOC): None

Signal Words: Danger

Pictograms



GHS Classification:

| | |
|-------------------|-------------|
| Flammable liquids | Category 2 |
| Eye irritation | Category 2A |

GHS Label Elements, including precautionary statements:

Hazard Statements:

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|------|-----------------------------------|
| H225 | Highly flammable liquid and vapor |
| H319 | Causes serious eye irritation. |

Precautionary Statements:

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| 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. |
| P264 | Wash hands thoroughly after handling. |

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| 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. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P337+P313 | If eye irritation persists: Get medical advice/attention. |
| P370+P378 | In case of fire: Use appropriate media to extinguish. |
| P403+P235 | Store in a well-ventilated place. Keep cool. |
| P501 | Dispose of contents/container in accordance with local regulations. |

Potential Health Effects

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| Eyes | Causes eye irritation |
| Inhalation | May causes respiratory tract irritation. |
| Skin | May cause skin irritation. |
| Ingestion | May be harmful if swallowed |

NFPA Ratings

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|------------------------|---------------|
| Health | 2 |
| 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 |
|---------------|----------|-----------|-------------------|----------------------------------|------------------|
| Ethyl Alcohol | 74-76 | 64-17-5 | 200-578-6 | C ₂ H ₅ OH | 46.07 g/mol |
| Water | Balance | 7732-18-5 | 231-791-2 | H ₂ O | 18.00 g/mol |

4. FIRST-AID MEASURES

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| 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. FIRE-FIGHTING MEASURES

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| Suitable (and unsuitable) extinguishing media | Flammable liquid. Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material. 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. Material can react violently with water (spattering and misting) and react with metals to produce flammable hydrogen gas. |
| Specific hazards arising from the chemical | Emits toxic fumes (carbon oxides) under fire conditions. See also Stability and Reactivity section. Vapors can travel to a source of ignition and flash back. Containers may explode in a fire. Cool |

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| | containers from a distance using water spray. SENSITIVE TO STATIC DISCHARGE. |
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6. ACCIDENTAL RELEASE MEASURES

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| Personal precautions, protective equipment and emergency procedures | See section 8 for recommendations on the use of personal protective equipment. |
| Environmental precautions | Prevent spillage from entering 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 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. Avoid sources of ignition. No smoking. 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. Store between 55-100°F for product stability. Do not store with strong oxidizing agents, strong acids, peroxides, aldehydes, halogens, ammonia, acid anhydrides or alkali metals.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls: Ventilation and appropriate grounding of containers.

| Component | Exposure Limits | Basis | Entity |
|---------------|------------------------------------|-------|--------|
| Ethyl Alcohol | 1000 ppm 1900 mg/m ³ | REL | NIOSH |
| | 1000 ppm 1900 mg/m ³ | PEL | OSHA |
| | 1000 ppm 1880 mg/m ³ | STEL | ACGIH |
| | 3300 ppm | IDLH | OSHA |

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

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| Eyes | Wear chemical safety glasses or goggles. |
| Inhalation | Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator. |
| Skin | Wear nitrile or rubber gloves, apron or lab coat. |
| Other | Not Available |

Other Recommendations

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

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| Appearance (physical state, color, etc.) | Clear, colorless liquid |
| Odor | Mild alcohol |
| Odor threshold | Not Available |
| pH | Not Available |
| Melting point/freezing point | -144°C (-227.2°F) |
| Initial boiling point and boiling range | 78°C (172.4°F) to 80°C (174°F) |
| Flash point | 14°C (57.2°F) |
| Evaporation rate | Not Available |
| Flammability (solid, gas) | Flammable liquid. |
| Upper/lower flammability or explosive limit | 3.3-19% |
| Vapor pressure | (@ 20°C) 44.6 mmHg |
| Vapor density | (air=1) 1.6 |
| Relative density | 0.8313 |
| Solubility (ies) | Completely soluble in water |
| Partition coefficient: n-octanol/water | Not Available |
| Auto-ignition temperature | 363°C (685.4°F) |
| Decomposition temperature | Not Available |

10. STABILITY AND REACTIVITY

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| Chemical Stability | Stable |
| Possibility of Hazardous Reactions | Will not occur. |
| Conditions to Avoid | Keep away from heat, flame and sparks. |
| Incompatible Materials | Alkali metals, Ammonia, Oxidizing agents, peroxides. |
| Hazardous Decomposition Products | Carbon oxides |

11. TOXICOLOGICAL INFORMATION**Acute Toxicity***Isopropyl Alcohol*

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| Skin | Not Available |
| Eyes | Not Available |
| Respiratory | LC50 Inhalation – rat – 10 h – 20000 ppm |
| Ingestion | LD50 Oral – rat – 7,060 mg/kg Remarks: Lungs, Thorax, or Respiration: Other changes. |

Carcinogenicity

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| IARC | No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. |
| ACGIH | A3: Confirmed animal carcinogen with unknown relevance to humans. (Ethyl 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

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| Skin | Irritation |
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| Eyes | Irritation |
| Respiratory | Irritation |
| Ingestion | Irritation |

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|---------------------------------------|----------------------|
| Chronic Toxicity | Not Available |
| Teratogenicity | Not Available |
| Mutagenicity | Not Available |
| Embryotoxicity | Not Available |
| Target Organ(s) | Nerves, Liver, Heart |
| Reproductive Toxicity | Not Available |
| Respiratory/Skin Sensitization | Not Available |

12. ECOLOGICAL INFORMATION

Ecotoxicity

Isopropyl Alcohol

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| Aquatic Vertebrate | LC ₅₀ (96 hours): 13,000 mg/L Oncorhynchus mykiss (Rainbow Trout) |
| Aquatic Invertebrate | Not Available |
| Terrestrial | Not Available |

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|--------------------------------------|---------------------|
| Persistence and Degradability | Not Available |
| Bioaccumulative Potential | Will not accumulate |
| Mobility in Soil | Not Available |
| PBT and vPvB Assessment | Not Available |
| Other Adverse Effects | Not Available |

13. DISPOSAL CONSIDERATIONS

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| 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

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| US DOT | UN1170, Ethanol solutions, 3, pg II |
| TDG | UN1170, ETHANOL SOLUTIONS, 3, pg II |
| IMDG | UN1170, ETHANOL SOLUTIONS, 3, pg II |
| Marine Pollutant | No |
| IATA/ICAO | UN1170, Ethanol solutions, 3, pg II |

15. REGULATORY INFORMATION

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| TSCA Inventory Status | All ingredients are listed on the TSCA Active inventory. |
| DSL / NDSL | All ingredients are listed on the DSL inventory. |

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| California Proposition 65 | Listed: Ethyl Alcohol |
| Rhode Island: Hazardous Substance List | Listed: Ethyl Alcohol |
| Massachusetts: Toxic or Hazardous Substance List, Right to Know | Listed: Ethyl Alcohol |
| Pennsylvania: Hazardous Substance List | Listed: Ethyl Alcohol |
| New Jersey: Right to Know Hazardous Substance List | Listed: Ethyl Alcohol |
| SARA 302 | Not Listed |
| SARA 304 | Not Listed |
| SARA 311 | Fire Hazard, Acute Health Hazard. |
| SARA 312 | Fire Hazard, Acute Health Hazard. |
| SARA 313 | Not Listed |
| WHMIS Canada | Class B2: Flammable and combustible material – Flammable liquid. Class D2B: Poisonous and infectious material – Other effects – Toxic. |

16. OTHER INFORMATION

| Revision | Date |
|------------|------------|
| Original | 02/14/2013 |
| Revision 1 | 03/17/2016 |
| Revision 2 | 04/18/2022 |

Disclaimer: The information provided in this Safety Data Sheet (“SDS”) is correct to the best of our knowledge, information, and belief at the date of publication. The information in this SDS relates only to the specific Product identified under Section 1, and does not relate to its use in combination with other materials or products, or its use as to any particular process. Those handling, storing, or using the Product should satisfy themselves that they have current information regarding the particular way the Product is handled, stored or used and that the same is done in accordance with federal, state and local law. WE DO NOT MAKE ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING (WITHOUT LIMITATION) WARRANTIES WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN OR WITH RESPECT TO FITNESS FOR ANY PARTICULAR USE. WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, INJURY, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT.