

Reagent Alcohol, 200 Proof

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Reagent Alcohol, 200 Proof

Synonyms/Generic Names: None

Product Number: 4613

Product Use: Industrial, Manufacturing or Laboratory use

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

For More Information Call: 920-623-2140 (Monday-Friday 8:00-4:30)

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

2. HAZARDS IDENTIFICATION

Target Organs: Eyes

Signal Words: Danger

Pictograms



GHS Classification:

Flammable liquids	Category 2
Acute toxicity, Oral	Category 4
Skin irritation	Category 2
Eye irritation	Category 2B
Specific target organ toxicity-single exposure, Narcotic effects.	Category 3
Specific target organ toxicity-single exposure	Category 1

GHS Label Elements, including precautionary statements:

Hazard Statements:

H225	Highly flammable liquid and vapor.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H320	Causes eye irritation.
H336	May cause drowsiness and dizziness.
H370	Causes damage to organs.

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.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P362	Take off contaminated clothing and wash before reuse.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P352	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with plenty of soap and water/shower.
P301+P330+P312	IF SWALLOWED: Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P340	IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.
P307+P311	IF exposed: Call a POISON CENTER or doctor/physician
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation occurs: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P370+P378	In case of fire: Use appropriate media to extinguish.
P403+P405+P233+P235	Store in a well-ventilated place. Store locked up. Keep container tightly closed. Keep cool.
P501	Dispose of contents/container in accordance with local regulations.

Potential Health Effects

Eyes	Causes eye irritation. May cause blindness.
Inhalation	Causes respiratory tract irritation.
Skin	Causes skin irritation.
Ingestion	Harmful if swallowed. May be fatal.

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
Ethyl Alcohol	85 – 95	64-17-5	200-578-6	C ₂ H ₅ OH	18.00 g/mol
Methyl Alcohol	2 - 6	67-56-1	200-659-6	CH ₄ O	32.04 g/mol
Isopropyl Alcohol	2 - 6	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 immediately.
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 immediately.
Skin	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention if irritation occurs.
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

Suitable (and unsuitable) extinguishing media	Flammable in the presence of a source of ignition when the temperature is above the flash point. Use dry chemical, carbon dioxide, dry sand. Do not use jet water. Cool unopened 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).
Specific hazards arising from the chemical	Emits toxic fumes (carbon oxides and other organic compounds) 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. Sensitive to static discharge. See Section 10, Stability and Reactivity.

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	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	Neutralize spill. Absorb spill with 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

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed and in cool storage when not in use. Avoid formation of aerosols. Use explosion-proof equipment. Take measures to prevent the build-up 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	TWA	NIOSH
	1900 mg/m ³		
	1000 ppm	TWA	OSHA
	1900 mg/m ³		
	1000 ppm	STEL	ACGIH
	1880 mg/m ³		
2-Propanol (Isopropyl alcohol)	200 ppm	TWA	ACGIH
	492 mg/m ³		
	400 ppm	STEL	ACGIH
	984 mg/m ³		
	400 ppm	TWA	OSHA
	980 mg/m ³		
	400 ppm	TWA	NIOSH
	980 mg/m ³		
	500 ppm	STEL	NIOSH
	1225 mg/m ³		
Methyl Alcohol	200 ppm	TWA	ACGIH
	262 mg/m ³		
	250 ppm	STEL	ACGIH
	328 mg/m ³		
	200 ppm	TWA	OSHA
	260 mg/m ³		
	200 ppm	TWA	NIOSH
	260 mg/m ³		
	250 ppm	STEL	NIOSH
	325 mg/m ³		

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 usually 15 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, complete body suit.
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

Appearance (physical state, color, etc.)	Clear, colorless liquid
Odor	Mild alcohol odor.
Odor threshold	Not Available
pH	Not Available

Melting point/freezing point	-130°C (-202°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	Slower than ether
Flammability (solid, gas)	Flammable
Upper/lower flammability or explosive limit	3.3 – 24.5%
Vapor pressure	59.5 hPa at 20°C (68°F)
Vapor density	(air=1) 1.6
Relative density	0.785 g/cm ³
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

Chemical Stability	Stable under recommended storage conditions.
Possibility of Hazardous Reactions	Vapors may form explosive mixture. Reacts with air to form peroxides.
Conditions to Avoid	Heat, flames, sparks and contact with strong oxidizing agents. Extremes of temperature.
Incompatible Materials	Aluminum, acids, oxidizing agents, alkali metals, halogenated compounds, ammonia, acid chlorides, acid anhydrides, reducing agents, peroxides.
Hazardous Decomposition Products	Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Ethyl Alcohol

Skin	Not Available
Eyes	Not Available
Respiratory	LC50 Inhalation – rat – 124.7 mg/l – 4h
Ingestion	LD50 Oral – rat – 10,470 mg/kg

Isopropyl Alcohol

Skin	LD50 Dermal – rabbit – 12,800 mg/kg
Eyes	Not Available
Respiratory	LD50 Inhalation – rat – 37.5 mg/l – 4h
Ingestion	LD50 Oral – rat – 5,045 mg/kg

Methyl Alcohol

Skin	LD50 Dermal – rabbit – 17,100 mg/kg
Eyes	Not Available
Respiratory	Not Available
Ingestion	LDLo Oral – Human - 143 mg/kg

Carcinogenicity

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	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 ACGIH.
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	Irritation, dryness.
Eyes	Irritation, watering eyes. May cause blindness.
Respiratory	Irritation, coughing, dizziness, drowsiness, headache.
Ingestion	Irritation, central nervous system depression, narcosis, dizziness, nausea, drowsiness. May be fatal.

Chronic Toxicity	This product contains ethanol. Alcohol beverage consumption has been associated with brain damage, heart damage, and pancreatitis in humans
Teratogenicity	Not Available
Mutagenicity	Not Available
Embryotoxicity	Not Available
Specific Target Organ Toxicity	Nerves, Liver, Heart, Eyes, Kidneys, Central nervous system, Gastrointestinal system
Reproductive Toxicity	Not Available
Respiratory/Skin Sensitization	Not Available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ethyl Alcohol

Aquatic Vertebrate	LC50 – Pimephales promelas (fathead minnow) – 15,300 mg/l – 96h
Aquatic Invertebrate	LC50 – Ceriodaphnia dubia (water flea) – 5,012 mg/l – 48h
Terrestrial	Not Available

Isopropyl Alcohol

Aquatic Vertebrate	LC50 – Pimephales promelas (fathead minnow) – 9,640 mg/l – 96 h
Aquatic Invertebrate	EC50- Daphnia magna (water flea) – 13,299 mg/l – 24 h
Terrestrial	Not Available

Methyl Alcohol

Aquatic Vertebrate	LC50 - Lepomis Macrochirus (Bluegill) – 15,400 mg/l – 96h
Aquatic Invertebrate	EC50- Daphnia magna (Water flea) – 18,260 mg/l – 96 h
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	UN1987, Alcohol, n.o.s., (Ethanol, Methanol) 3, pg II
TDG	UN1987, ALCOHOL, N.O.S., (ETHANOL, METHANOL) 3, pg II
IMDG	UN1987, ALCOHOL, N.O.S., (ETHANOL, METHANOL) 3, pg II
Marine Pollutant	No
IATA/ICAO	UN1987, Alcohol, n.o.s., (Ethanol, Methanol) 3, pg II

15. REGULATORY INFORMATION

TSCA Inventory Status	All ingredients are listed on the TSCA Active inventory.
DSL / NDSL	All ingredients are listed on the DSL inventory.
California Proposition 65	Listed: Methanol
Massachusetts: Toxic or Hazardous Substance List	Listed: Ethanol, Methanol, 2-Propanol
New Jersey: Right to Know Hazardous Substance List	Listed: Ethanol, Methanol, 2-Propanol
Pennsylvania: Hazardous Substance List	Listed: Ethanol, Methanol, 2-Propanol
Rhode Island: Hazardous Substance List	Listed: Ethyl alcohol, Methyl alcohol, Isopropyl alcohol
SARA 302	Not Listed
SARA 304	Not Listed
SARA 311	Fire Hazard, Acute Health Hazard, Chronic Health Hazard
SARA 312	Fire Hazard, Acute Health Hazard, Chronic Health Hazard
SARA 313	Listed: Isopropyl Alcohol, Methyl Alcohol
WHMIS Canada	Class B2: Flammable and combustible material – Flammable liquid. Class D2B: Poisonous and infectious material – or other effects.

16. OTHER INFORMATION

Revision	Date
Original	02/02/2021

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