ChemPure Chemicals

Safety Data Sheet

Reagent Alcohol Denatured

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Reagent Alcohol Absolute , ACS, Denatured, Purified

Synonyms/Generic Names: None

Product Number: CP-D9085P, CP-B9085P, CP-E9085, CP-T9085

Product Use: Industrial, Manufacturing or Laboratory use

Manufacturer: ChemPure Brand Chemicals
39103 Warren Road
Westland, MI 48185

For More Information Call: 734-729-1805 (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

OSHA Hazards: Flammable liquid, Target organ effect, Toxic by inhalation, Toxic by ingestion, Toxic by skin absorption, Irritant, Carcinogen

Target Organs: Nerves, Liver, Heart, Eyes, Kidneys, Central nervous system, Gastrointestinal sysytem

Signal Words: Danger

Pictograms

GHS Classification:

Flammable liquids	Category 2
Acute toxicity, Oral	Category 5
Skin irritation	Category 2
Eye irritation	Category 2B
Specific target organ toxicity-single exposure	Category 1
Specific target organ toxicity-single exposure	Category 3

GHS Label Elements, including precautionary statements:

Hazard Statements:

H225	Highly flammable liquid and vapor.
H303	May be harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H370	Causes damage to organs.

Precautionary Statements:

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P307+P311	IF exposed: Call a POISON CENTER or doctor/ physician.

Potential Health Effects

Eyes	Causes eye irritation
Inhalation	Toxic if inhaled. Causes respiratory tract irritation.
Skin	Toxic if absorbed through skin. Causes skin irritation.
Ingestion	Toxic if swallowed

NFPA Ratings

Health	2
Flammability	3
Reactivity	0
Specific hazard	Not Available

HMIS Ratings

Health	2
Fire	3
Reactivity	0
Personal	H

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight %	CAS #	EINECS# / ELINCS#	Formula	Molecular Weight
Ethyl Alcohol	>90	64-17-5	200-578-6	C_2H_5OH	46.07 g/mol
Methyl Alcohol	5	67-56-1	200-659-6	CH_4O	32.04 g/mol
Isopropyl Alcohol	>4	67-63-0	200-661-7	C_3H_8O	60.10 g/mol

4. FIRST-AID MEASURES

Eyes	In case of eye contact, rinse with plenty of water 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 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. 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 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	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 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 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
Isopropyl Alcohol	200 ppm 492 mg/m^3	TLV	ACGIH
	400 ppm 984 mg/m^3	STEL	ACGIH
	400 ppm 980 mg/m^3	PEL	OSHA
	2000 ppm	IDLH	OSHA
	400 ppm 980 mg/m^3	REL	NIOSH
	500 ppm 1225 mg/m^3	STEL	NIOSH
Methyl Alcohol	200 ppm 262 mg/m^3	TLV	ACGIH
	250 ppm 328 mg/m^3	STEL	ACGIH
	200 ppm 260 mg/m^3	PEL	OSHA

	200 ppm 260 mg/m^3	REL	NIOSH
	250 ppm 325 mg/m^3	STEL	NIOSH

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 of goggles, and face shield.
Inhalation	Full or half face respirators with organic cartridges if exposure levels exceed PELs. Provide local exhaust, preferably mechanical.
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	-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
Upper/lower flammability or explosive limit	3.3-19%
Vapor pressure	(@ 20°C) 44.6 mmHg
Vapor density	(air=1) 1.6
Relative density	Not Available
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 with air.
Conditions to Avoid	Heat, flames and sparks. Extremes of temperature and direct sunlight.
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 – 10 h – 20000 ppm
Ingestion	LD50 Oral – rat – 7,060 mg/kg Remarks: Lungs, Thorax, or Respiration: Other changes.

Isopropyl Alcohol

Skin	LD50 Dermal- rabbit- 12,800 mg/kg
Eyes	Eyes-rabbit- Eye irritation- 24 h
Respiratory	LD50 Inhalation- rat- 8 h- 16,000 ppm
Ingestion	LD50 Oral- rat- 5,045 mg/kg

Methyl Alcohol

Skin	LD50 Dermal- rabbit- 15,800 mg/kg
Eyes	Eyes- rabbit- Eye irritation- 24 hour
Respiratory	LC_{50} rat- 85 mg/L, 4 hours LC_{50} rat- 64000 ppm, 4 hours
Ingestion	LD_{50} rat- 5,628 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	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

Skin	Irritation, dryness.
Eyes	Irritation, watering eyes.
Respiratory	Irritation, coughing, dizziness, drowsiness, headache.
Ingestion	Irritation, central nervous system depression, narcosis, dizziness, nausea, drowsiness.

Chronic Toxicity	Not Available
Teratogenicity	Not Available
Mutagenicity	Not Available
Embryotoxicity	Not Available
Specific Target Organ Toxicity	Not Available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ethyl Alcohol

Aquatic Vertebrate	LC_{50} (96 hours): 13,000 mg/L Oncorhynchus mykiss (Rainbow Trout)
Aquatic Invertebrate	Not Available
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)- 5,102 mg/l- 24 h
Terrestrial	Not Available

Methyl Alcohol

Aquatic Vertebrate	LC_{50}= 15,400 mg/L, 96 hours (Lepomis Macrochirus) LC50- Oncorhynchus mykiss (rainbow trout)- 19,000 mg/l- 96 h LC50- Cyprinus carpio (Carp)- 36,000.00 mg/l- 48 h
Aquatic Invertebrate	EC50- Daphnia magna (Water flea)- 24,500.00 mg/l- 48 h EC100- Daphnia magna (Water flea)- 10,000.00 mg/l- 24 h
Terrestrial	Not Available

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

Waste 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 container.
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	UN1170, Ethanol, 3, pg II
TDG	UN1170, ETHANOL, 3, pg II
IMDG	UN1170, ETHANOL, 3, pg II
Marine Pollutant	No
IATA/ICAO	UN1170, Ethanol, 3, pg II

15. REGULATORY INFORMATION

TSCA Inventory Status	All ingredients are listed on the TSCA inventory.
DSCL (EEC)	All ingredients are listed on the DSCL inventory.
California Proposition 65	Listed: Ethyl Alcohol (in alcoholic beverages)
SARA 302	Not Listed
SARA 304	Not Listed
SARA 311	Ethyl Alcohol, Isopropyl Alcohol, Methyl Alcohol
SARA 312	Ethyl Alcohol, Isopropyl Alcohol, Methyl Alcohol
SARA 313	Listed: Ethyl Alcohol, Isopropyl Alcohol, Methyl Alcohol
WHMIS Canada	Class B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).

16. OTHER INFORMATION

Revision	Date
Revision 1	08-04-2011
Revision 2	11-16-2021