

Dehydrated Alcohol

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QUANTUM CHEMICAL CORPORATION

USI Division

MATERIAL SAFETY DATA SHEET

DEHYDRATED ALCOHOL USP

MSDS NO. 1200/1205

ISSUE DATE: 4/28/92

EMERGENCY NUMBERS:

QUANTUM: (713) 479-2873

CHEMTREC: (800) 424-9300

PRODUCT INFORMATION:

QUANTUM: (800) 543-5900

WARNING! FLAMMABLE. KEEP AWAY FROM HEAT, SPARKS, FLAME AND ALL OTHER IGNITION SOURCES. VAPOR MAY FORM FLAMMABLE MIXTURES WITH AIR. MAY BE HARMFUL OR FATAL IF SWALLOWED. May irritate body tissues. Use with adequate ventilation. Avoid breathing vapor. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling.

SECTION I - IDENTIFICATION

PRODUCT: Dehydrated Alcohol USP, Ethyl Alcohol, 200 Proof, Rectified, 100% R

SYNONYMS: Ethyl Alcohol - 200 Proof; Alcohol, Anhydrous; Ethanol

CHEMICAL FAMILY: Alcohol

CAS RN: 64-17-5

SECTION II - INGREDIENTS

COMPOSITION	NOMINAL %	PEL/TLV	HAZARD
Dehydrated Alcohol (Ethanol) CAS No. 64-17-5	100	TWA: 1000 ppm	Flammable/Nervous System Depressant

SECTION III - HEALTH INFORMATION

INHALATION: Exposure to over 1000 ppm may cause headache, drowsiness and lassitude, loss of appetite, inability to concentrate and irritation of the throat. No evidence of teratogenicity (birth defects) was noted following inhalation exposure by pregnant rats of airborne vapor concentrations of up to 16,000 ppm for 7 hours on days 1 through 19 of gestation. In the same study, pregnant rats exposed to 20,000 ppm showed severe narcosis; offspring of these rats did not show clear evidence of increased incidence of abnormalities.

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SECTION III - HEALTH INFORMATION (CONTINUED)

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INGESTION: Can cause depression of central nervous system, nausea, vomiting, diarrhea.

**NOTE:** Ingestion of alcoholic beverages by pregnant women is associated with "fetal alcohol syndrome" in offspring. The International Agency for Research on Cancer (IARC) has reported a relationship between drinking alcoholic beverages and cancer of the oral cavity, pharynx, larynx, esophagus and liver.

EYE CONTACT: Liquid or vapor may cause irritation.

SKIN CONTACT: May cause irritation and defatting of skin on prolonged contact.

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SECTION IV - OCCUPATIONAL EXPOSURE LIMITS

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PEL (OSHA Permissible Exposure Limit): 1000 ppm (1900 mg/m<sup>3</sup>)

TLV (ACGIH Threshold Limit Value): 1000 ppm (1900 mg/m<sup>3</sup>)

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SECTION V - EMERGENCY FIRST AID PROCEDURE

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FOR OVEREXPOSURE BY:

SWALLOWING: If victim is conscious and able to swallow, have victim drink water or milk to dilute. Never give anything by mouth if victim is unconscious or having convulsions. CALL A PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. Induce vomiting only if advised by physician or Poison Control Center.

INHALATION: Immediately remove victim to fresh air. If victim has stopped breathing, give artificial respiration, preferably mouth-to-mouth. GET MEDICAL ATTENTION IMMEDIATELY.

CONTACT WITH EYES OR SKIN: Immediately flush affected area with plenty of cool water. Eyes should be flushed for at least 15 minutes. Remove and wash contaminated clothing before reuse. GET MEDICAL ATTENTION IMMEDIATELY.

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SECTION VI - PHYSICAL DATA

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BOILING POINT: 173°F  
MELTING POINT: -173°F  
VAPOR PRESSURE: 44.6 mm Hg @ 68°F  
SPECIFIC GRAVITY: 0.7937 @ 60/60°F  
VAPOR DENSITY (AIR=1): 1.59  
SOLUBILITY IN WATER: Complete  
APPEARANCE AND COLOR: Clear and colorless

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SECTION VII - FIRE AND EXPLOSION HAZARDS

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FLASH POINT: 55°F ASTM D-56 (Tag Closed Cup)

AUTO-IGNITION TEMPERATURE: 685°F

FLAMMABLE LIMITS IN AIR, % BY VOL. LOWER: 3.3

UPPER: 19

NFPA RATING: HEALTH ( 0 ) FIRE ( 3 ) REACTIVITY ( 0 )

(Does not apply to exposure hazards other than during a fire.)

FIRE FIGHTING PROCEDURES: (Note - Individuals should perform only those fire-fighting procedures for which they have been trained.) Use dry chemical, "alcohol" foam, or carbon dioxide; water may be ineffective, but water should be used to keep fire-exposed containers cool. If a leak or spill has not ignited, use water spray to disperse the vapors and to protect personnel attempting to stop a leak. Water spray may be used to flush spills away from exposures and to dilute spills to nonflammable mixtures (NFPA-49 1975).

UNUSUAL FIRE & EXPLOSION HAZARDS: Firefighters should wear self-contained breathing apparatus in the positive pressure mode with a full facepiece when there is a possibility of exposure to smoke, fumes or hazardous decomposition products.

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SECTION VIII - REACTIVITY

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STABILITY: Generally stable

HAZARDOUS POLYMERIZATION: Not likely

CONDITIONS & MATERIALS TO AVOID: Contact with acetyl chloride and a wide range of oxidizing agents may react violently.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide can form on incomplete combustion.

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SECTION IX - EMPLOYEE PROTECTION

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CONTROL MEASURES: Engineering controls should be used whenever feasible to maintain concentrations below acceptable exposure criteria (Section II and IV), including but not limited to enclosures, local ventilation and dilution ventilation.

RESPIRATORY PROTECTION: Where exposure is likely to exceed acceptable criteria, use NIOSH/MSHA approved respiratory protection equipment. Respirators should be selected based on the form and concentration of contaminant in air and in accordance with OSHA (29 CFR 1910.134).

PROTECTIVE CLOTHING: Wear gloves and protective clothing which are impervious to this product for the duration of anticipated exposure if there is potential for skin contact.

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SECTION IX - EMPLOYEE PROTECTION (CONTINUED)

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**EYE PROTECTION:** Wear safety glasses meeting the specifications of ANSI Standard Z87.1 where no contact with the eye is anticipated. Chemical safety goggles meeting the specifications of ANSI Standard Z87.1 should be worn whenever there is the possibility of splashing or other contact with the eyes.

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SECTION X - ENVIRONMENTAL PROTECTION

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**ENVIRONMENTAL PRECAUTIONS:** Avoid uncontrolled releases of this material. Where spills are possible, a comprehensive spill response plan should be developed and implemented.

**SPILL OR LEAK PROCEDURES:** Wear appropriate respiratory protection and protective clothing as described in Section IX. Contain spilled material. Transfer to secure containers. Where necessary, collect using absorbent media. In the event of an uncontrolled release of this material, the user should determine if the release is reportable under applicable laws and regulations.

**WASTE DISPOSAL:** All recovered material should be packaged, labeled, transported and disposed of or reclaimed in conformance with applicable laws and regulations and in conformance with good engineering practices.

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SECTION XI - REGULATORY CONTROLS

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**DEPARTMENT OF TRANSPORTATION:**

DOT CLASSIFICATION: Flammable Liquid  
DOT PROPER SHIPPING NAME: Ethyl Alcohol  
OTHER DOT INFORMATION: Identification No. UN1170  
Emergency Response Guide No. 26

**OTHER REGULATORY REQUIREMENTS:**

ATF Distilled Spirits Act

Use of ethyl alcohol without prior payment of applicable excise tax is strictly controlled by regulations promulgated and enforced by the Bureau of Alcohol, Tobacco and Firearms, Dept. of the Treasury. Governing regulations have been defined in Title 27, Code of Federal Regulations.

Toxic Substance Control Act

This product is listed in the TSCA Inventory of Chemical Substances.

SARA Title III (Sections 311/312) Hazard Categories:

Immediate/Acute Health  
Delayed/Chronic Health  
Fire Hazard

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SECTION XI - REGULATORY CONTROLS (CONTINUED)

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New Jersey Right to Know

Ethyl alcohol is listed

Pennsylvania Right to Know

Ethanol is listed

California Proposition 65

This product contains less than 0.5 ppm (typically less than 0.15 ppm) of benzene (71-43-2) which has been listed as being "known to the State of California to cause cancer".

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SECTION XII - PRECAUTIONS: HANDLING, STORAGE AND USAGE

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Protect container against physical damage. Detached or outside storage is preferred. Inside storage should be in an NFPA approved flammable liquids storage room or cabinet. All ignition sources should be eliminated. Smoking should be prohibited in storage areas. Electrical installations should be in accordance with Article 501 of the National Electrical Code. NFPA 30, Flammable and Combustible Liquids Code, should be followed for all storage and handling. Frequent careful leakage inspection should be done. Automatic sprinkler system should be provided. Isolate from oxidizers, chemicals capable of spontaneous heating, materials reacting with air or moisture to liberate heat, ignition sources and explosives. Consult local fire codes for additional storage information.

When contents are being transferred, the metallic container must be bonded to the receiving container and grounded to avoid static discharges. Never use pressure to empty. Replace closure securely after each opening.

Keep packaged material out of sun and away from heat. Remove closure carefully; internal pressure may be present. Keep closure up to prevent leakage.

Containers hazardous when emptied. Since emptied containers retain residual product (vapor or liquid), all precautions described on this MSDS must be observed.

FOR INDUSTRIAL USE ONLY. NOT FOR HOUSEHOLD USE. NOT INTENDED OR PERMITTED FOR DRINKING BEVERAGE PURPOSES.

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PREPARED BY:

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Regulatory Affairs Department  
Quantum Chemical Corporation RJS/DGH  
USI Division  
Allen Research Center  
11530 Northlake Drive  
P. O. Box 429566  
Cincinnati, OH 45249

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