.MATERIAL SAFETY DATA SHEET

REAGENT ALCOHOL, 200 Proof

AAPER MSDS NUMBER: 6-A | EFFECTIVE DATE: May 2005

AAPER Alcohol and Chemical Company
1101 Isaac Shelby Drive, P. O. Box 339
Shelbyville, Kentucky 40066-0339
Telephone: (502) 633-0650

For chemical emergency – spill, leak, fire, exposure, or accident, call CHEMTREC at 1-800-424-9300 day or night.
Outside the continental United States, call CHEMTREC at 1-703-527-3887 (collect calls accepted).

AAPER Alcohol and Chemical Company urges the customer receiving this Material Safety Data Sheet (MSDS) to study it carefully to become aware of hazards, if any, of the product involved. In the interest of safety, you should: (1) notify your employees, agents, and contractors of the information on this sheet, and (2) furnish a copy to each of your customers to inform their employees and customers as well.

SECTION I – IDENTIFICATION

PRODUCT NAME:	Reagent Alcohol, 200 Proof
SYNONYMS:	Denatured Ethyl Alcohol
CHEMICAL FAMILY:	Alcohol

Section II – INGREDIENTS

COMPOSITION	CAS RN.	NOMINAL WT/WT%	PEL/TLV	HAZARD
Ethyl Alcohol	64-17-5	90.50	1000 ppm	Flammable/Nervous System Depressant
Methyl Alcohol	67-56-1	4.53	200 ppm	Flammable/Poison
Isopropyl Alcohol	67-63-0	4.97	400 ppm	Flammable

SECTION III – HEALTH INFORMATION

INHALATION:	Exposure to over 1000 ppm may cause headache, drowsiness and lassitude, loss of appetite, and inability to concentrate. Irritation of the throat.
INGESTION:	Can cause depression of central nervous system, nausea, vomiting, and diarrhea.
EYE CONTACT:	Liquid or vapor may cause irritation.
SKIN CONTACT:	May cause irritation and defatting of skin on prolonged contact.
OTHER:	Individual responses to methyl alcohol vary. Ingestion of less than 30 ml (0.34 g/kg) has been fatal to humans. In general, a few ounces may cause blindness and death; as little as 4 ml may be toxic if ingested.

SECTION IV – EMERGENCY FIRST AID PROCEDURE

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 CHEMTREC (POISON CONTROL) IMMEDIATELY. Induce vomiting only if advised by physician or Chemtrec (Poison Control).
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.

SECTION V – PHYSICAL DATA

BOILING POINT:	173° F*
FREEZING POINT:	-173° F*
VAPOR PRESSURE:	44.6 mm Hg @ 68° F*
SPECIFIC GRAVITY:	0.7930 @ 60°/60° F
VAPOR DENSITY (AIR = 1):	1.59*
SOLUBILITY IN WATER:	Complete
APPEARANCE AND COLOR:	Clear and colorless

SECTION VI – FIRE AND EXPLOSIVE HAZARDS

FLASH POINT:	**56° F ASTM D-56 (Tag Closed Cup)**		
AUTO-IGNITION TEMPERATURE:	685° F*		
FLAMMABLE LIMITS IN AIR, % BY VOLUME:	LOWER: 3.3*	UPPER: 19*	
NFPA (National Fire Protection Association) RATING:	HEALTH (1)	FIRE (3)	REACTIVITY (0)*

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

*For pure ethyl alcohol

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

SECTION VII – REACTIVITY

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.

SECTION VIII – EMPLOYEE PROTECTION

CONTROL MEASURES:	Handle in the presence of adequate 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 the product for the duration of the anticipated exposure if there is potential for prolonged or repeated skin contact.
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.

SECTION IX – ENVIRONMENTAL PROTECTION

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.

SECTION X – REGULATORY CONTROLS

DEPARTMENT OF TRANSPORTATION (DOT):		
DOT CLASSIFICATION:	3 (Flammable Liquid)	**FOR PINT DOMESTIC SHIPMENTS ONLY**
DOT PROPER SHIPPING NAME:	Ethanol Solutions	ORM-D
OTHER DOT INFORMATION:	Identification No. UN1170 P.G. II Emergency Response Guide No. 127	Consumer Commodity ORM-D
TTB DISTILLED SPIRITS ACT:	Use of ethyl alcohol without prior payment of applicable excise tax is strictly controlled by regulation promulgated and enforced by the Tax and Treasury Bureau (TTB). Governing regulations have been defined in Title 27, Code of Federal Regulations.	
TOXIC SUBSTANCE CONTROL ACT (TSCA):	This product is listed in the TSCA Inventory of Chemical Substances.	

SECTION XI – PRECAUTIONS: HANDLING, STORAGE, AND USAGE

Protect container against physical damage. Detached or outside storage is preferred. Inside storage should be in an NFPA approved flammable liquid storage room or cabinet. All ignition sources should be eliminated. Smoking should be prohibited in the storage and usage 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 inspections should be done. An 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 material packaged in drums or bottles out of sun and away from heat. Remove closure carefully; internal pressure may be present. Keep closure on to prevent leakage.

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

CAUTION: For manufacturing, processing, repackaging, or industrial use.

SECTION XII – SARA TITLE III

Components present in this product at a level that could require reporting under the statute (section 313) are:

Chemical	CAS Number	Concentration
Methanol	67-56-1	4.53%

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must conduct testing and/or make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees.