

MSDS**Material Safety Data Sheet**

AZER SCIENTIFIC

24 HOUR EMERGENCY
TELEPHONE NUMBER
CALL CHEMTREC
1-800-424-9300

189 Twin County Road • Morgantown, PA 19543 • (610) 524-5810

80% Reagent Alcohol**SECTION 1 PRODUCT IDENTIFICATION**

NAME: 80% Reagent Alcohol
EVER SCIENTIFIC ORDER NUMBERS: ES750
SYNONYMS: N/I
CAS NO: Mixture
FORMULA: [C₂H₆OH, CH₃OH, C₃H₈OH]
DOT INFORMATION: Proper Shipping Name - "Ethanol"
 Hazard Class: 3
 UN Number: 1170
 Packing Group: II

Composition of Ingredients

Ingredient	CAS #	Percent	Hazardous
Ethyl Alcohol	64-17-5	72%	Yes
Methyl Alcohol	67-56-1	4.0%	Yes
Isopropyl Alcohol	67-63-0	4.0%	Yes

****LABEL HAZARD STATEMENT AND PRECAUTIONS****

WARNING! **POISON! MAY BE FATAL IF SWALLOWED!** FLAMMABLE LIQUID AND VAPOR. HARMFUL IF INHALED. MAY BE HARMFUL IF SWALLOWED OR ABSORBED THROUGH SKIN. MAY CAUSE SKIN OR EYE IRRITATION. Keep away from heat, sparks and flame. Keep container tightly closed. Avoid breathing vapor. Use only with adequate ventilation. Avoid contact with skin, eyes and clothing. Do not taste or swallow. Wash thoroughly after handling.

SECTION 2 HAZARDOUS INGREDIENTS / EXPOSURE LIMITS

INGREDIENT/CAS NO	OSHA (PEL)	ACGIH (TLV)
Ethyl Alcohol	1000 ppm (TWA)	500 ppm (TWA)
Methyl Alcohol	200 ppm (TWA)	200 ppm (TWA)
Isopropyl Alcohol	400 ppm	400 ppm

SECTION 3 PHYSICAL / CHEMICAL CHARACTERISTICS

SOLUBILITY IN WATER: Miscible
VAPOR PRESSURE (mm Hg): 40 @ 20 C
SPECIFIC GRAVITY: 0.86 @ 20°C/4°C
EVAPORATION RATE (BuAc=1): ca. 3.3
APPEARANCE AND ODOR: Clear, colorless liquid with characteristic bourbon smell.

BOILING POINT (C): 83
VAPOR DENSITY: 1.5
MELTING POINT (C): Not Established
pH: Not Determined

SECTION 4 FIRE / EXPLOSION HAZARD DATA

NFPA RATINGS: (Estimated) HEALTH: 2 FIRE: 4 REACTIVITY: 1
CONTACT RATING: 2 - moderate
FLASH POINT (C): 12 C (CC)
AUTOIGNITION TEMPERATURE (C): 403
FLAMMABLE LIMITS (%) UEL: 3 LEL: 19.0
EXTINGUISHING MEDIA: Water spray, dry chemical, "alcohol" foam, CO₂.
SPECIAL FIRE FIGHTING PROCEDURES: Firefighters should wear self-contained breathing apparatus with full face-piece operated in pressure-demand or other positive-pressure mode.
UNUSUAL FIRE AND EXPLOSION HAZARDS: Above flash point, vapor-air mixtures can be explosive within flammable limits indicated. Vapors may travel along surfaces and flash back to source. Sensitive to static discharge.

SECTION 5 REACTIVITY DATA

STABILITY: Stable under normal conditions
CONDITIONS TO AVOID: Excessive heat, flames or ignition sources.
MATERIALS TO AVOID: Strong oxidants, silver salts, metal hydrides, hydrazines.
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon dioxide and carbon monoxide may form when heated to decomposition
HAZARDOUS POLYMERIZATION: Does not occur.

SECTION 6 HEALTH HAZARD DATA

ROUTES OF ENTRY AND POTENTIAL EFFECTS OF OVEREXPOSURE
INHALATION: Vapor inhalation causes respiratory tract irritation. May cause drowsiness, loss of appetite, inability to concentrate.
SKIN CONTACT: Causes drying of skin and potentially severe irritation with prolonged skin exposure.
EYE CONTACT: May cause irritation and potentially blurred vision.
INGESTION: Swallowing in may cause abdominal pain, intoxication, gastritis, nausea, headache, vomiting. Swallowing large doses may be fatal. Lung exposure can produce severe lung damage and is considered a medical emergency.
CHRONIC EXPOSURE: Prolonged exposure can cause irritation and potentially blindness. Methanol is a cumulative poison and death has been reported by ingestion of as little as 30 ml's. Impaired liver and kidney function has been demonstrated by exposure to alcohols.
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Individuals with previous eye, skin, or kidney may be more affected by exposure to this material.
CARCINOGENICITY: None

****FIRST AID PROCEDURES****

EYE CONTACT: Immediately flush with plenty of water for at least 15 minutes. Get medical attention.
SKIN CONTACT: Immediately flush with plenty of water for at least 15 minutes, while removing contaminated clothing and shoes. Get medical attention for persistent irritation.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

INGESTION: Aspiration hazard. If ingested vomiting may occur spontaneously. If individual is not already vomiting do not induce. Keep individuals head below their lungs by seating head between knees. **Call physician immediately as soon as possible!**

SECTION 7 PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED OR RELEASED: Ventilate area and remove sources of ignition. Absorb spill with inert material and containerize for disposal.

WASTE DISPOSAL METHOD: Dispose in accordance with all applicable federal, state, and local environmental regulations.

STORAGE: Store tightly closed in an approved flammable liquid storage area. Store away from sunlight.

SECTION 8 CONTROL MEASURES

VENTILATION: Local preferred.

RESPIRATORY PROTECTION: Full face-piece respirator.

EYE PROTECTION: Chemical splash goggles and/or full face-shield. Maintain eye wash station in area where this reagent is used.

SKIN PROTECTION: Gloves, lab coat and impervious apron as necessary to prevent any skin contact.

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