SAFETY DATA SHEET

Denatured Alcohol (Ethanol, Denatured)

Revised: 07/01/2026

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Denatured Alcohol (Ethanol, Denatured)
Synonyms: ethanol, denatured (with methanol)
CAS Number: 64-17-5 (ethanol); 67-56-1 (methanol, denaturant)
Grade/Purity: O-E-760D (methanol-denatured)
Product Type: Flammable Solvent (Liquid)
Product Use: Industrial, Manufacturing or Laboratory use
Manufacturer/Supplier: Alliance Chemical, 204 South Edmond St, Taylor, Texas 76574
Information: 512-365-6838 | www.alliancechemical.com
Emergency: CHEMTEL - 800-255-3924 (24 Hours/Day, 7 Days/Week)

2. HAZARDS IDENTIFICATION

Signal Word: Danger

GHS Pictograms:



Hazard Statements:

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H371	May cause damage to organs (central nervous system).

Precautionary Statements:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.
P260	Do not breathe vapours or mist.
P264	Wash hands and skin thoroughly after handling.
P280	Wear protective gloves, protective clothing and eye/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes; remove contact lenses if present and easy; continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P308+P311	IF exposed or concerned: Call a POISON CENTER or doctor.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents and container in accordance with all applicable regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	% MIN	% MAX	CAS #	EINECS# / ELINCS#	FORMULA	MOLECULAR WEIGHT
Ethanol	85	99	64-17-5	200-578-6	C_2H_6O	46.07 g/mol
Isopropyl alcohol (denaturant)	1	15	67-63-0	200-661-7	C_3H_8O	60.10 g/mol

4. FIRST-AID MEASURES

Eyes	Immediately flush with plenty of water for at least 15 minutes, holding eyelids open. Remove contact lenses if present. Get medical attention if irritation persists.
Skin	Remove contaminated clothing. Wash affected area with soap and water. Get medical attention if irritation develops or persists.
Inhalation	Remove to fresh air. If breathing is difficult, give oxygen. Get medical attention if symptoms (e.g. CNS effects) develop or persist.
Ingestion	Do NOT induce vomiting. Rinse mouth. Call a POISON CENTER or physician if exposed or concerned, or if symptoms develop. Contains methanol (~4-5%); larger or repeated ingestion warrants medical evaluation.

5. FIRE-FIGHTING MEASURES

Suitable Media	Alcohol-resistant foam, CO2, dry chemical powder. Water spray may be used to cool fire-exposed containers.
Unsuitable Media	Do not use a solid water stream — may scatter and spread fire.
Protective Equipment	Wear self-contained breathing apparatus and full protective clothing.
Combustion Products	May include carbon oxides and other toxic fumes. See Section 10.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Use PPE as described in Section 8. Ensure adequate ventilation. Evacuate personnel to safe areas.
Environmental	Prevent leakage or spillage from entering drains, sewers, or waterways.
Containment & Cleanup	Absorb with inert material. Collect in appropriate waste container. Dispose per applicable regulations.

7. HANDLING AND STORAGE

Safe Handling	Use with adequate ventilation. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. Keep container closed when not in use.
Safe Storage	Store in a cool, dry, well-ventilated area away from heat, sparks, and open flame. Keep away from: Strong oxidizers (nitric/perchloric acid, peroxides, permanganates), alkali metals, acetyl chloride, acetic anhydride. Keep containers tightly closed. Ground and bond containers when transferring material.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Use adequate ventilation. Provide eyewash stations and quick-drench showers accessible to areas of use.

Occupational Exposure Limits:

AGENCY	EXPOSURE LIMIT
OSHA PEL	Ethanol 1000 ppm; Methanol 200 ppm (skin) TWA
ACGIH TLV	Methanol 200 ppm TWA / 250 ppm STEL (skin); Ethanol STEL 1000 ppm
NIOSH REL	Methanol 200 ppm / 250 ppm STEL (skin); Ethanol 1000 ppm
IDLH	Methanol 6000 ppm; Ethanol 3300 ppm

Eyes	Wear chemical safety goggles or face shield.
Skin	Wear chemical-resistant gloves and protective clothing.
Inhalation	Use a NIOSH-approved respirator with organic vapor cartridges. For confined spaces or exposures above the OEL, use supplied-air respiratory protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear, colorless liquid with alcoholic odor
Odor	Mild, sweet, alcoholic
Median Particle Size	Not Applicable

Particle Size Distribution	Not Applicable
Particle Shape	Not Applicable
Surface Area	Not Applicable
Dustiness	Not Applicable
Hygroscopicity	Not Applicable
pH	Not applicable (neutral)
Melting Point	-114 C (ethanol)
Boiling Point	~78-79 C
Flash Point	~12-13 C (closed cup)
Vapor Pressure	~59 mmHg at 25 C (ethanol)
Specific Gravity	~0.79 (20 C)
Solubility	Miscible with water
Molecular Formula	C_2H_6O (ethanol) + CH_4O (methanol)
Molecular Weight	46.07 (ethanol) g/mol

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended storage conditions.
Hazardous Reactions	Vapors form explosive mixtures with air. Incompatible with strong oxidizers (nitric/perchloric acid, peroxides, permanganates), strong acids, alkali metals, and reactive metals (can liberate hydrogen). Reacts violently with acetyl chloride and acetic anhydride. Static discharge can ignite vapors.
Conditions to Avoid	Heat, sparks, open flame, and incompatible materials.
Incompatible Materials	Strong oxidizers (nitric/perchloric acid, peroxides, permanganates), alkali metals, acetyl chloride, acetic anhydride
Decomposition Products	May produce carbon oxides and other toxic fumes when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: See below for route-specific data.

ROUTE	VALUE
LD50 Oral	Ethanol 7060 mg/kg (rat); methanol 5600 mg/kg (rat). Human methanol lethal dose is far lower (~30-100 mL).
LD50 Dermal	Methanol ~15800 mg/kg (rabbit); methanol IS absorbed through skin.
LC50 Inhalation	Methanol ~64000 ppm (rat, 4 h); toxic vapor.

IARC	Not listed as carcinogen.
NTP	Not listed as carcinogen.
OSHA	Not listed as carcinogen.

12. ECOLOGICAL INFORMATION

Ecotoxicity	Fish LC50: Low acute aquatic toxicity (both components); Daphnia EC50: Low acute toxicity [PubChem]
Persistence	Readily biodegradable; not persistent.
Bioaccumulation	BCF: Low; not bioaccumulative
Mobility in Soil	High mobility in soil (Log Kow < 1)

13. DISPOSAL CONSIDERATIONS

Dispose of contents/container in accordance with applicable federal, state, and local regulations. Do not dispose of into drains or waterways.

14. TRANSPORT INFORMATION

US DOT	UN1987, Alcohols, n.o.s. (contains ethanol, methanol), 3, PG II
IMDG	UN1987, Alcohols, n.o.s. (contains ethanol, methanol), 3, PG II
IATA/ICAO	UN1987, Alcohols, n.o.s. (contains ethanol, methanol), 3, PG II
Marine Pollutant	No

15. REGULATORY INFORMATION

TSCA: ethanol (64-17-5) and methanol (67-56-1) both listed. SARA 313 (TRI): METHANOL is a listed toxic chemical (reportable) above threshold; ethanol is not. CERCLA: methanol RQ 5000 lb. California Proposition 65: METHANOL IS LISTED (added by OEHHA 2012 as a developmental/reproductive toxicant; still listed) - a Prop 65 WARNING IS required (CORRECTED 2026-07-01; this file previously and incorrectly stated methanol was not listed). Ethanol itself is separately listed only as 'alcoholic beverages' (not applicable here). State Right-to-Know: ethanol and methanol listed in MA, NJ, PA. US DOT: UN1987 Alcohols, n.o.s., Class 3, PG II.	
SARA 311/312	See Section 2 for hazard classifications.

16. OTHER INFORMATION

Revision Date: 07/01/2026

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