**SDS #:** 326
**Revision Date:** March 21, 2014

# Ethyl Alcohol Denatured Safety Data Sheet (SDS)

## SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

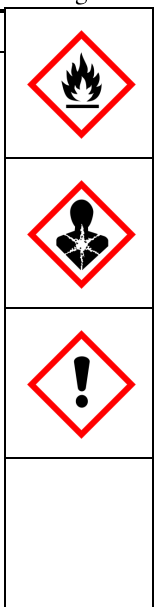
## Ethyl Alcohol Denatured

**Signal Word**
**DANGER**

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261
Chemtrec Emergency Phone Number: (800) 424-9746

## SECTION 2 — HAZARDS IDENTIFICATION

Pictograms



Hazard class: Flammable liquids (Category 2). Highly flammable liquid and vapor (H225). Keep away from heat, sparks, open flames, and hot surfaces. No smoking (P210).

Hazard class: Acute toxicity, oral (Category 4). Harmful if swallowed (H302). Do not eat, drink or smoke when using this product (P270).

Hazard class: Skin and serious eye damage, corrosion or irritation (Category 2, 2A). Causes skin and serious eye irritation (H315+H319).

Hazard class: Specific target organ toxicity, single exposure; respiratory tract irritation (Category 3). May cause respiratory irritation (H335). Avoid breathing mist, vapors or spray (P261).

Hazard class: Specific target organ toxicity, single exposure (Category 1). Causes damage to organs (H370).
Addition of denaturant makes the product poisonous. Cannot be made nonpoisonous.

## SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

| Component Name | CAS Number | Formula | Formula Weight | Concentration |
|---|---|---|---|---|
| Ethyl alcohol | 64-17-5 | $C_2H_5OH$ | 46.07 | 80-86% |
| Isopropyl alcohol | 67-63-0 | $C_3H_8O$ | 60.10 | 9% |
| Methyl alcohol | 67-56-1 | $CH_3OH$ | 32.04 | 4-5% |
| Methyl isobutyl ketone | 108-10-1 | $C_6H_{12}O$ | 100.16 | 1% |
| Water | 7732-18-5 | $H_2O$ | 18.00 | 5% |
| Synonyms: Ethanol (BE0011, BE0014) | | | | |

## SECTION 4 — FIRST AID MEASURES

**If exposed or concerned:** Call a POISON CENTER or physician (P307+P311).
**If inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P340). **If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338). **If eye irritation persists eyes:** Get medical advice or attention (P337+P313). **If on skin or hair:** Immediately remove all contaminated clothing. Rinse skin with water (P303+P361+P353).
**If swallowed:** Rinse mouth.**Call a POISON CENTER or physician if you feel unwell (P302+P301+P312).**

## SECTION 5 — FIRE FIGHTING MEASURES

Class IB flammable liquid due to ethyl alcohol content.
Flash point: 21 °C
When heated, releases flammable fumes.
In case of fire: Use a tri-class dry chemical fire extinguisher (P370+P378).

| NFPA Code |
|---|
| H-2 |
| F-3 |
| R-0 |

## SECTION 6 — ACCIDENTAL RELEASE MEASURES

Remove all ignition sources and ventilate area. Contain the spill with sand or other inert absorbent material and deposit in a sealed bag or container. See Sections 8 and 13 for further information.

## SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Organic #2. Store with alcohols, glycols, amines and amides. Store in a dedicated flammables cabinet. If a flammables cabinet is not available, store in Flinn Saf-Stor™ can.
Keep container tightly closed and cool (P233+P235). Use explosion-proof electrical and ventilating equipment (P241). Take precautionary measures against static discharge (P243).

## SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). Use only in a hood or well-ventilated area (P271).
Exposure guidelines: (as ethyl alcohol) PEL 1000 ppm (OSHA), Ceiling 1000 ppm (ACGIH)

## SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Clear liquid. Strong alcohol odor.
Soluble: Miscible with water and many organic solvents.

Boiling point: 78 °C
Melting point: -144 °C
Specific gravity: 0.7893

## SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with oxidizing agents, peroxides, acids, acid chlorides, acid anhydrides, alkali metals, ammonia, moisture, heat, open flame, or any source of ignition.
Shelf life: Excellent, if stored properly.

## SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Eye irritation, nausea, dizziness, headache.
Chronic effects: Liver damage, reproductive, teratogenic effects, carcinogen.
Target organs: Eyes, skin, central nervous system, liver, reproductive system.

ORL-RAT $LD_{50}$: 7060 mg/kg (as ethyl alcohol)
IHL-RAT $LC_{50}$: 20,000 ppm/10H (as ethyl alcohol)
SKN-RBT $LD_{50}$: N.A.

## SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

## SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.
Flinn Suggested Disposal Method #26b is one option.

## SECTION 14 — TRANSPORT INFORMATION

Shipping name: Ethyl alcohol solution. Hazard class: 3, Flammable liquid. UN number: UN1170.

## SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (200-578-6), RCRA code D001.

## SECTION 16 — OTHER INFORMATION

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N.A. = Not available, not all health aspects of this substance have been fully investigated.
N/A = Not applicable

**Consult your copy of the Flinn Science Catalog/Reference Manual for additional information about laboratory chemicals.**

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