

SAFETY DATA SHEET

190 Proof GNS Ethanol

SECTION 1. IDENTIFICATION

Product identifier	Ethyl Alcohol USP 190 Proof GNS
Other identifiers	190 Proof Ethanol; ethyl alcohol; ethanol; grain neutral spirits; CAS 64-17-5
Recommended use	Ingredient and general-purpose organic solvent.
Restrictions on use	For industrial/professional use. Not for beverage use. Use only as permitted by applicable federal, state, and local requirements.
Distributor / responsible party	Solvents USA 9436 W Lake Mead Blvd., Suite 5-1216 Las Vegas, NV 89134, USA
Business telephone	708-280-1184
24-hour emergency telephone	CHEMTREC: 800-424-9300 (United States/Canada)

SECTION 2. HAZARD(S) IDENTIFICATION

OSHA HCS classification	Flammable liquid - Category 2 Serious eye irritation - Category 2A Specific target organ toxicity, single exposure - Category 3 (respiratory tract irritation; narcotic effects)
Signal word	DANGER
Hazard statements	H225 Highly flammable liquid and vapor. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness.



FLAME



EXCLAMATION

Prevention	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof equipment and non-sparking tools. Take action to prevent static discharges. Avoid breathing vapor or mist. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves and eye/face protection.
Response	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do; continue rinsing. If eye irritation persists, get medical advice. In case of fire: Use alcohol-resistant foam, dry chemical, carbon dioxide or water fog.
Storage	Store in a well-ventilated place. Keep container tightly closed and cool. Store locked up where required.
Disposal	Dispose of contents/container in accordance with applicable regulations.
Other hazards	Vapors may form explosive mixtures with air, travel to an ignition source and flash back. Repeated skin contact may cause drying or cracking.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Ethyl alcohol	CAS 64-17-5 approximately 95.0% by weight
Water	CAS 7732-18-5 approximately 5.0% by weight
Product basis	Composition is based on the supplied 190 Proof GNS SDS. Product is undenatured unless the shipment specification states otherwise.

SECTION 4. FIRST-AID MEASURES

Inhalation	Move to fresh air. Keep at rest in a position comfortable for breathing. Obtain medical attention if symptoms persist or if the person feels unwell. Give oxygen or artificial respiration only by trained personnel.
Skin contact	Remove contaminated clothing. Rinse skin promptly with water, then wash with soap and water. Get medical advice if irritation persists. Wash clothing before reuse.
Eye contact	Immediately rinse cautiously with water for at least 15 minutes, lifting eyelids occasionally. Remove contact lenses if present and easy to do. Continue rinsing. Obtain medical attention if irritation persists.
Ingestion	Rinse mouth. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek prompt medical advice or contact a poison center.
Important symptoms/effects	Eye, nose and throat irritation; headache, dizziness, drowsiness, impaired coordination and central nervous system depression. Repeated skin exposure may cause dryness or dermatitis.
Medical attention	Treat symptomatically. No specific antidote. Protect the airway and monitor respiratory and central nervous system function.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable media	Alcohol-resistant foam, dry chemical, carbon dioxide, water spray or water fog.
Unsuitable media	Do not use a direct, solid water stream; it may spread burning liquid.
Specific hazards	Highly flammable liquid and vapor. Vapor is heavier than air and may travel and flash back. Containers may rupture when heated. Ethanol flames may be difficult to see. Combustion may produce carbon monoxide and carbon dioxide.
Firefighter protection	Wear positive-pressure self-contained breathing apparatus and full protective clothing. Cool exposed containers with water spray from a protected location. Withdraw if containers discolor or venting sounds increase.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Evacuate unnecessary personnel. Eliminate ignition sources. Ventilate. Avoid breathing vapor/mist and contact with eyes or skin. Wear Section 8 protection. Use non-sparking tools and grounded/bonded equipment.
Environmental precautions	Prevent entry into drains, sewers, waterways, basements and confined spaces. Notify authorities when required.
Containment/cleanup	Stop leak if safe. Dike large spills. Absorb with dry earth, sand or other noncombustible absorbent and place in compatible, labeled containers. Water spray may reduce vapor but may not prevent ignition in enclosed spaces.

SECTION 7. HANDLING AND STORAGE

Safe handling	Use adequate ventilation. Keep away from ignition sources. Ground and bond containers and transfer equipment. Use explosion-proof electrical/ventilation equipment and non-sparking tools. Avoid breathing vapor and eye/skin contact. Do not cut, weld, drill or pressurize empty containers; residue may remain flammable.
Storage	Keep tightly closed in a cool, dry, well-ventilated flammable-liquid storage area, protected from heat and direct sunlight. Keep away from strong oxidizers and other incompatible materials. Store drums upright with closures secured. Ensure drums, totes and cargo tanks are approved, labeled, grounded as appropriate and protected from physical damage. Follow NFPA 30 and applicable fire codes.
Tanker/cargo tank transfer	Only trained personnel may load or unload. Verify product, receiving capacity, valves, hoses, connections and bonding/grounding before transfer. Set brakes, chock wheels and continuously attend the operation. Prevent splash filling, overfill and static discharge. Drain and safely disconnect lines under site procedures and current DOT requirements.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA PEL	Ethanol: 1,000 ppm (1,900 mg/m ³), 8-hour TWA.
NIOSH REL / IDLH	REL: 1,000 ppm (1,900 mg/m ³), up to 10-hour TWA. IDLH: 3,300 ppm (10% of LEL).
ACGIH TLV	STEL: 1,000 ppm. Consult the current licensed TLV publication.
Engineering controls	Provide general and/or local exhaust ventilation to control exposure and flammable vapor accumulation. Use electrically classified equipment where required. Provide eyewash and safety shower where exposure may occur.
Eye/face	Chemical splash goggles; add face shield where splashing is likely.
Hands/skin	Chemical-resistant gloves selected for the task and supplier breakthrough data (e.g., butyl rubber or fluoroelastomer). Wear protective clothing where contact is possible.
Respiratory	If ventilation cannot maintain exposure below limits, use a NIOSH-approved respirator selected under a compliant respiratory protection program. For unknown/IDLH concentrations, use positive-pressure SCBA or equivalent supplied-air protection.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state / color	Clear, colorless liquid
Odor / odor threshold	Alcohol-like; threshold not determined
Melting/freezing point	-114.1 C (-173.4 F)
Boiling point	78.5 C (173.3 F)
Flammability	Highly flammable liquid and vapor
Flammability limits	Lower 3.3 vol%; upper 19 vol%
Flash point	13-16 C (55-61 F), closed cup (ASTM D56 per supplier)
Auto-ignition	363 C (685 F)
Decomposition temperature	No data available
pH	No data available / not applicable to anhydrous product
Kinematic viscosity	No data available
Solubility	Completely miscible with water
Log Kow	-0.35 at 20 C
Vapor pressure	44.6 mm Hg at 20 C
Evaporation rate	No data available
Density	0.8158 g/cm ³ at 15.56 C (source SDS)
Relative vapor density	1.6 (air = 1)
Particle characteristics	Not applicable - liquid

SECTION 10. STABILITY AND REACTIVITY

Reactivity	No dangerous reaction expected under normal conditions.
Stability	Stable under recommended handling and storage conditions.
Hazardous reactions	Vapor/air mixtures may ignite or explode. Violent reactions may occur with strong oxidizers and certain reactive chemicals.
Conditions to avoid	Heat, sparks, flames, static discharge and other ignition sources.
Incompatible materials	Strong oxidizers; acetyl chloride; acetyl bromide; bromine pentafluoride; potassium dioxide; and other highly reactive materials.
Decomposition products	Carbon monoxide and carbon dioxide during combustion.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely routes	Inhalation, ingestion, skin contact and eye contact.
Acute effects	Causes serious eye irritation. Vapor may irritate the respiratory tract and cause headache, dizziness, drowsiness, impaired coordination or central nervous system depression.
Acute toxicity	Oral LD50 (rat): >7,692 mg/kg (supplier). Dermal LD50 (rabbit): >15,800 mg/kg (supplier). Not classified for acute toxicity based on available data.
Skin effects	Not classified for skin corrosion/irritation; repeated contact may defat, dry or crack skin.
Sensitization/mutagenicity	Not classified based on available information.
Carcinogenicity	Not classified for occupational exposure to this industrial product. IARC Group 1 applies to ethanol in alcoholic beverages; NTP lists alcoholic beverage consumption, not industrial ethanol exposure, as a known human carcinogenic exposure.
Reproductive toxicity	Not classified for intended industrial use based on the supplier assessment. Adverse effects associated with intentional alcoholic beverage consumption are not expected from normal occupational use.
STOT	Single exposure Category 3: respiratory irritation and narcotic effects. Repeated exposure: not classified. High repeated oral doses may affect the liver.
Aspiration hazard	Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity	Low acute toxicity to fish, aquatic invertebrates, algae and sewage microorganisms; not classified as hazardous to the aquatic environment based on available data.
Persistence/degradability	Readily biodegradable; supplier reports 74% degradation after 5 days.
Bioaccumulation	Not expected to bioaccumulate (log Kow -0.35).
Mobility/other effects	Expected to be mobile in soil and water. No additional adverse-effect data available.

SECTION 13. DISPOSAL CONSIDERATIONS

Recover or recycle when feasible. Dispose through a licensed waste contractor in accordance with federal, state and local requirements. Unused product may exhibit the RCRA ignitability characteristic (D001); the generator must make the final waste determination. Do not discharge to drains or waterways. Empty containers may retain flammable vapor and residue; do not cut, weld, puncture or reuse unless properly cleaned and reconditioned.

SECTION 14. TRANSPORT INFORMATION

U.S. DOT	UN1170, Ethanol (Ethyl alcohol), 3, PG II; Emergency Response Guide 127.
TDG (Canada)	UN1170, ETHANOL, 3, PG II.
IATA	UN1170, Ethanol, 3, PG II. Passenger/cargo quantity limits and packing instructions apply.
IMDG	UN1170, ETHANOL, 3, PG II; marine pollutant: No.
Packaging / precautions	Drums, intermediate bulk containers/totes and highway cargo tanks must be authorized, compatible, closed, marked, labeled/placarded and documented under current modal requirements. Package, mark, label, placard and document each shipment according to its mode, quantity and configuration. Trained shipping personnel must determine shipment-specific compliance.

SECTION 15. REGULATORY INFORMATION

EPCRA 311/312	Hazard categories include flammable (fire hazard), serious eye damage/eye irritation, and specific target organ toxicity - single exposure.
EPCRA 313	Ethanol is not subject to Section 313 reporting.
CERCLA	Ethanol is not assigned a CERCLA reportable quantity as an individual listed hazardous substance. Releases may still be reportable under other federal, state or local requirements.
RCRA	Unused material may be a characteristic hazardous waste for ignitability (D001).
TSCA	Ethanol is listed on the TSCA Chemical Substance Inventory.
California Proposition 65	Ethanol in alcoholic beverages is listed; this product is not intended for beverage use. Evaluate product-specific exposure and labeling obligations with qualified counsel.

SECTION 16. OTHER INFORMATION

Preparation date	July 24, 2026
Revision	1.0 - Initial updated Solvents USA issue
Primary sources	Supplied Ethyl Alcohol USP 190 Proof GNS SDS, Revision 2 dated February 11, 2019; OSHA HCS 2024 Appendix D; OSHA/NIOSH ethanol occupational data; current U.S. hazardous-materials framework.
NFPA 704 (reference)	Health 2 Flammability 3 Instability 0

Distributor statement: Solvents USA distributes this product by direct shipment and does not manufacture, blend, handle or warehouse it. This fact does not change the precautions required for carriers, consignees, users or emergency responders.

The information is based on data believed reliable at the date of issue and is intended for hazard communication. It is not a product specification or warranty. Conditions of use are outside Solvents USA's control; users must determine suitability and comply with applicable requirements.

END OF SAFETY DATA SHEET