SAFETY DATA SHEET

Petroleum Ether

Revised: 07/01/2026

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Petroleum Ether
Synonyms: Petroleum Ether
CAS Number: 8032-32-4
Grade/Purity: ACS / Technical
Product Type: Flammable Hydrocarbon 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:

H224	Extremely flammable liquid and vapor.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H401	Toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

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.
P243	Take precautionary measures against static discharge.
P280	Wear protective gloves, protective clothing, and eye/face protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor.
P331	Do NOT induce vomiting.
P370+P378	In case of fire: Use dry chemical, CO2, alcohol-resistant foam, or water fog to extinguish.
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
Petroleum Ether	100	100	8032-32-4	232-453-7	Hydrocarbon mixture	Varies g/mol

4. FIRST-AID MEASURES

Eyes	Immediately flush eyes 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 skin with soap and plenty of water. Get medical attention if irritation develops or persists.
Inhalation	Remove person to fresh air and keep comfortable for breathing. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.
Ingestion	Do NOT induce vomiting - ASPIRATION HAZARD (may be fatal if it enters the lungs). Rinse mouth. Never give anything by mouth to an unconscious person. Get immediate medical attention.

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 acid, halogens (chlorine), strong acids. 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	500 ppm (~2000 mg/m3) TWA (petroleum distillates/naphtha)
ACGIH TLV	300-400 ppm (component-based)
NIOSH REL	350 mg/m3 TWA; 1800 mg/m3 (15-min ceiling) for petroleum distillates
IDLH	1100 ppm (petroleum distillates/naphtha)

Eyes	Wear chemical safety goggles or face shield.
Skin	Wear chemical-resistant gloves and protective clothing.
Inhalation	Use NIOSH-approved respirator if exposure limits are exceeded or irritation occurs.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear, colorless, volatile liquid
Odor	Mild gasoline-like petroleum hydrocarbon odor
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 (water-insoluble hydrocarbon)
Melting Point	< -73 C (mixture; no true MP)
Boiling Point	~35-60 C
Flash Point	-49 C (-56 F)
Vapor Pressure	~250-400 mmHg at 20 C (high volatility)
Specific Gravity	0.63-0.66 (water = 1)
Solubility	Insoluble in water
Molecular Formula	Hydrocarbon mixture
Molecular Weight	Varies g/mol

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended storage conditions.
Hazardous Reactions	Vapor may form explosive mixtures with air; reacts vigorously with strong oxidizers (fire/explosion). Vapors are heavier than air and may travel to an ignition source and flash back. Accumulates static charge.
Conditions to Avoid	Heat, sparks, open flame, and incompatible materials.
Incompatible Materials	Strong oxidizers, nitric acid, halogens (chlorine), strong acids
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	>5000 mg/kg (rat, low acute oral toxicity)
LD50 Dermal	>3000 mg/kg (rabbit)
LC50 Inhalation	>5000 ppm (rat, vapor)

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

12. ECOLOGICAL INFORMATION

Ecotoxicity	Fish LC50: ~2-10 mg/L (96 h, freshwater fish); Daphnia EC50: ~1-10 mg/L (48 h) [PubChem]
Persistence	Readily biodegradable under aerobic conditions
Bioaccumulation	BCF: Moderate bioaccumulation potential (log Kow > 3)
Mobility in Soil	Low mobility in soil (Log Kow > 3)

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	UN1268, Petroleum distillates, n.o.s., 3, PG I
IMDG	UN1268, Petroleum distillates, n.o.s., 3, PG I
IATA/ICAO	UN1268, Petroleum distillates, n.o.s., 3, PG I
Marine Pollutant	No

15. REGULATORY INFORMATION

TSCA: listed (low-boiling point naphtha, CAS 8032-32-4). SARA 313 (TRI): not listed as the mixture (check for benzene/n-hexane components). SARA 311/312: Fire Hazard, Acute Health Hazard. CERCLA: RQ 10 lb (per real vendor SDS; also listed as RCRA waste code D018 - ignitability characteristic when discarded). California Proposition 65: benzene-free ACS petroleum ether is generally not listed, but petroleum distillates containing benzene would trigger a Prop 65 carcinogen warning - confirm grade is benzene-free. State Right-to-Know: listed. US DOT: Class 3, UN1268, PG I; aspiration hazard (H304); marine pollutant (IMDG).	
SARA 311/312	See Section 2 for hazard classifications.

16. OTHER INFORMATION

Revision Date: 07/01/2026

Disclaimer: The information provided in this Safety Data Sheet is correct to the best of our knowledge at the date of publication. It relates only to the specific product identified and does not relate to its use in combination with other materials. ALLIANCE CHEMICAL MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. ALLIANCE CHEMICAL DOES NOT ASSUME LIABILITY FOR LOSS, INJURY, DAMAGE, OR EXPENSE ARISING FROM THE HANDLING, STORAGE, USE, OR DISPOSAL OF THIS PRODUCT.