

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

| | |
|--------------|---|
| Product name | Petroleum Ether |
| CAS number | 8032-32-4 |
| Synonyms | Ligroine; Benzine; Naphtha Petroleum; Naphtha Solvent |

1.2 Relevant identified uses of the substance or mixture and uses advised against

| | |
|-----------------|----------------------|
| Identified uses | Laboratory Chemicals |
|-----------------|----------------------|

1.3 Details of the supplier of the safety data sheet

| | |
|-----------|--|
| Company | Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A. |
| Telephone | 512-668-9918 |
| Fax | 512-886-4008 |

1.4 Emergency telephone

| | | |
|-------------------|------------------------------|----------|
| Emergency Phone # | US & Canada: 1-800-535-5053 | INFOTRAC |
| | International 1-352-323-3500 | INFOTRAC |

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture


GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

| | |
|--|-------------|
| Flammable liquids | Category 2 |
| Eye Irritation | Category 2B |
| Skin irritation | Category 2 |
| Specific Target Organ Toxicity - single exposure | Category 3 |
| Aspiration Hazard | Category 1 |

Acute Aquatic Toxicity
Chronic Aquatic Toxicity

Category 2
Category 2

2.2 GHS Label elements, including precautionary statements

| | |
|--------------------------|--|
| Pictogram |  |
| Signal Word | Danger |
| Hazard statements | Highly flammable liquid and vapor. May be fatal if swallowed and enters airways. Causes skin irritation. Causes eye irritation. May cause drowsiness or dizziness. Harmful to aquatic life. Toxic to aquatic life with long lasting effects. |
| Precautionary statements | Prevention: Keep away from heat, open flames, and hot surface. No smoking. Wash hands thoroughly after handling. Ground/bond container and receiving equipment. Use explosion proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Avoid release into the environment. Wear protective gloves/protective clothing/eye protection/face protection. IF SWALLOWED: Get emergency medical help immediately, call a POISON CENTER or doctor/physician. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs, get medical help. Take off contaminated clothing and wash it before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical help if you feel 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 help. Fire: In case of fire, use foam, Carbon dioxide, or dry powder for extinction. Storage: Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up. Disposal: Collect spillage. Dispose of contents/container in accordance with local/regional/national/international regulations |

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None identified.

SECTION 3: Composition/information on ingredients

3.1 Components

| Chemical name | Common name and synonyms | CAS number | Concentration |
|---------------|--------------------------|------------|---------------|
| n-Pentane | - | 109-66-0 | 73-77% |
| Isopentane | - | 78-78-4 | < 1% |
| Hexane, mixed | - | 92112-69-1 | 23-27% |

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

If inhaled If breathing difficulties, dizziness, or light-headedness occur when working in areas with high vapor concentrations, remove victim to fresh air. If victim experiences continued breathing difficulties, keep patient warm and at rest, and seek medical attention. If breathing stops, begin artificial respiration and seek immediate medical attention.

In case of skin contact If this product comes into contact with the skin, wash with soap and water. Seek medical attention if irritation persists. Remove and wash contaminated clothing before re-use.

In case of eye contact If this product comes into contact with the eyes, flush with large quantities of water for several minutes, while gently holding the eyelids open. Seek medical attention if irritation persists.

If swallowed DO NOT INDUCE VOMITING. Give small quantities (<250 ml) of water to drink. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Petroleum ether may cause dizziness and drowsiness if inhaled, and high concentrations may result in central nervous system depression and loss of consciousness. Symptoms of ingestion may include nausea, vomiting, as well as symptoms of dizziness, drowsiness, and central nervous system depression. If vomiting occurs, petroleum ether may be aspirated into the lungs, with a risk of chemical pneumonitis.

4.3 Indication of any immediate medical attention and special treatment needed

If ingested or inhaled, seek medical attention immediately.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Use foam, Carbon dioxide, or dry powder extinguisher. Keep adjacent containers cool using water spray.

Unsuitable extinguishing media

For large fires, water spray should not be used, as petroleum ether is lighter than water and may form pools of burning liquid on top of water.

5.2 Specific hazards arising from the substance or mixture

Petroleum ether is extremely flammable. Remove all sources of ignition. Vapors are heavier than air and may travel considerable distances to a source of ignition and flash back. Vapor/air mixtures may be explosive. Electrostatic discharges may cause fire and/or explosion.

5.3 Special protective equipment and precautions for firefighters

Wear positive-pressure Self Contained Breathing Apparatus (SCBA).

5.4 Further information

Flash Point -40°F / -40°C

Autoignition Temperature No information available

Explosion limits

Upper 8.3% (v)

Lower 1.4% (v)

Sensitivity to Mechanical Impact No information available

Sensitivity to Static Discharge No information available

NFPA

| Health | Flammability | Instability | Physical hazards |
|--------|--------------|-------------|------------------|
| 1 | 4 | 0 | N/A |

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Remove all ignition sources and evacuate unnecessary personnel from the area. Ventilate the area if possible. Wear suitable protective clothing, including solvent resistant gloves and coveralls. If vapor concentrations are high, respiratory protective equipment may be required.

6.2 Environmental precautions

Prevent entry into sewers and watercourses. If product enters sewers or watercourses, inform the appropriate environmental authorities.

6.3 Methods and materials for containment and cleaning up

Small spills: Remove all ignition sources. Use non-sparking hand tools. Take precautions to avoid electrostatic discharge. Absorb spillage in a non-combustible absorbent, e.g. sand or vermiculite, and place in a suitable container for disposal.

Large spills: Remove all ignition sources. Use non-sparking hand tools. Contain spill and cover if possible to reduce evaporation. Transfer to a suitable container by mechanical means. Take precautions to avoid static discharge, e.g. by grounding containers, etc. Consider initial downwind evacuation for at least 300 meters (1,000 feet).

6.4 Reference to other sections

See Section 13 for disposal. Refer to Section 8 of SDS for personal protection details.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Use only in well-ventilated areas. Petroleum ether is extremely flammable. Avoid contact with all ignition sources, including hot surfaces. Take precautions to avoid electrostatic discharges, such as grounding of containers/equipment and restricting flow rates. Vapors are heavier than air and may accumulate in low lying areas and below ground areas such as ducts and sewers

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Store in a well-ventilated area, away from all ignition sources. If stored in drums, keep out of direct sunlight.

Incompatibilities

Strong oxidizing agents, strong acids, strong bases, and select amines.

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

| Component | Type | Value |
|-----------|------|---------------------------------|
| n-Pentane | TWA | 1000 ppm 3000 mg/m ³ |

US. ACGIH Threshold Limit Values

| Component | Type | Value |
|------------|------|--------------------------------|
| n-Pentane | TWA | 600 ppm 1800 mg/m ³ |
| Isopentane | TWA | 600 ppm 1800 mg/m ³ |

US. NIOSH: Pocket Guide to Chemical Hazards

| Component | Type | Biological specimen |
|-----------|------|---------------------|
| Hexane | IDLH | 1100 ppm |
| | TWA | 50 ppm 180 mg/m3 |

Biological occupational exposure limits

No information available.

8.2 Exposure controls

Appropriate engineering controls

Ensure there is sufficient ventilation of the area. The floor of the storage room must be impermeable to prevent the escape of liquids. General mechanical ventilation may be sufficient to keep product vapor concentrations within specified time-weighted TLV ranges. If general ventilation proves inadequate to maintain safe vapor concentrations, supplemental local exhaust may be required. Other special precautions, such as respiratory masks or environmental containment devices, may be required in extreme cases.

Personal protective equipment

Eye/face protection

Wear suitable eye protection, safety glasses or goggles, when handling this product.

Skin protection

Wear suitable chemical resistant gloves recommended for use with hydrocarbon solvent. Nitrile gloves may be suitable, but glove manufacturers' specifications should always be checked first. Natural rubber gloves are not suitable. Change gloves in accordance with manufacturer recommendations. If gloves are damaged during use, remove immediately and wash hands before replacing with new gloves.

Body Protection

Aprons or coveralls made of fire retardant material are recommended. These should be changed after use or if contaminated. Wash before re-use.

Respiratory protection

Use only in well-ventilated area. If high exposure levels are likely, then suitable respiratory protection will be required. Very high vapor concentrations may result in oxygen displacement and self-contained breathing apparatus or airline may be required.

Control of environmental exposure

Prevent entry into sewers and watercourses. If product enters sewers or watercourses, inform the appropriate environmental authorities.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| | |
|---|--------------------------|
| Physical State | Liquid |
| Appearance | Colorless |
| Odor | Gasoline-like |
| Odor Threshold | No information available |
| pH | No information available |
| Melting Point/Range | No information available |
| Boiling Point/Range | 100-140°F/35-60°C |
| Evaporation Rate | No information available |
| Flammability (solid) | Not applicable |
| Flammability or explosive limit | |
| Upper | 8.30% |
| Lower | 1.40% |
| Vapor Pressure | 14.0 psia |
| Vapor Density | No information available |
| Density | 0.64 kg/L |
| Solubility | Negligible |
| Partition coefficient; n-octanol/water | No data available |
| Autoignition Temp | No information available |
| Decomposition Temp | No information available |
| Viscosity | No information available |
| Molecular Formula | C6-16H12-34 |
| Molecular Weight | 82.2 g/mol |
| VOC Content(%) | No information available |
| Oxidizing properties | No information available |

9.2 Other safety information No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

None known, based on information available.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to avoid

Keep away from sources of ignition.

10.5 Incompatible materials

This product is incompatible with strong oxidizing agents, strong acids and bases, and selected amines.

10.6 Hazardous decomposition products

Carbon monoxide (CO), Carbon dioxide (CO₂), Hydrocarbons.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Harmful when inhaled in high concentrations or ingested. Petroleum ether may cause dizziness and drowsiness if inhaled, and high concentrations may result in central nervous system depression, and loss of consciousness. Symptoms of ingestion may include nausea, vomiting, as well as symptoms of dizziness, drowsiness, and central nervous system depression. If vomiting occurs, petroleum ether may be aspirated into the lungs, with a risk of chemical pneumonitis.

Skin corrosion/irritation

Not corrosive.

Serious eye damage/eye irritation

Petroleum ether can be irritating to the eye, may cause redness.

Respiratory or skin sensitization

Not known to be a sensitizer. Harmful when inhaled in high concentrations or ingested.

Germ cell mutagenicity

Not expected to be mutagenic.

Carcinogenicity

| Component | CAS | IARC | NTP | ACGIH | OSHA | Mexico |
|------------|------------|------------|------------|------------|------------|------------|
| n-Pentane | 109-66-0 | Not listed | Not listed | Not listed | Not listed | Not listed |
| Isopentane | 78-78-4 | Not listed | Not listed | Not listed | Not listed | Not listed |
| Hexane | 92112-69-1 | Not listed | Not listed | Not listed | Not listed | Not listed |

Specific target organ toxicity - single exposure

None known.

Specific target organ toxicity - repeated exposure

None known.

Reproductive toxicity

Not expected to be toxic to reproduction.

Chronic effects

Prolonged or repeated contact of this product will result in defatting of the skin, causing dryness and cracking.

11.2 Additional Information

The toxicological properties have not been fully investigated.

SECTION 12: Ecological information**12.1 Toxicity**

Petroleum ether is classified as toxic to aquatic organisms and likely to cause long-term effects in the environment.

12.2 Persistence and degradability

Petroleum ether is readily biodegradable in aquatic systems; however, in view of its high evaporation rate, petroleum ether is expected to volatilize rapidly from water sources into the atmosphere, where it will be degraded by photochemical reaction.

12.3 Bio accumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations**13.1 Waste Disposal Methods**

Chemical waste generators must determine whether a discarded chemical is classified

as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14: Transport information

DOT (US)

| | |
|----------------------|-------------------------------|
| UN Number | UN1268 |
| Proper Shipping name | Petroleum Distillates, n.o.s. |
| Hazard Class | 3 |
| Packaging Group | II |

IMDG

| | |
|----------------------|-------------------------------|
| UN Number | UN1268 |
| Proper Shipping name | Petroleum Distillates, n.o.s. |
| Hazard Class | 3 |
| Packaging Group | II |

IATA

| | |
|----------------------|-------------------------------|
| UN Number | UN1268 |
| Proper Shipping name | Petroleum Distillates, n.o.s. |
| Hazard Class | 3 |
| Packaging Group | II |

SECTION 15: Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not applicable.

CERCLA Hazardous Substance List (40 CFR 302.4)
Listed, Hexane isomers.

SARA 304 Emergency release notification
Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)
Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous

Fire Hazard, Acute Health Hazard.

SARA 313 (TRI reporting)

Listed, Hexane isomers.

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Listed, Pentane (CAS #109-66-0), TQ: 10000 lb.

Listed, Isopentane (CAS #78-78-4), TQ: 10000 lb.

Safe Drinking Water Act

Not regulated.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Not listed.

US state regulations**US. Massachusetts RTK - Substance List**

Listed, Petroleum Ether (CAS #8032-32-4).

Listed, Pentane (CAS #109-66-0).

Listed, Isopentane (CAS #78-78-4)

US. New Jersey Worker and Community Right-to-Know Act

Listed, Petroleum Ether (CAS #8032-32-4).

Listed, Pentane (CAS #109-66-0).

Listed, Isopentane (CAS #78-78-4)

US. Pennsylvania Worker and Community Right-to-Know Law

Listed, Petroleum Ether (CAS #8032-32-4).

Listed, Pentane (CAS #109-66-0).

Listed, Isopentane (CAS #78-78-4)

California Proposition 65

Not listed.

SECTION 16: Other information

Date of Issue: 11/16/2026

Revised on 06/18/2026

SECTION 17: Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.