

Safety Data Sheet

Petroleum Ether, 35-60°C, ACS

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Petroleum Ether, 35-60°C, ACS

Synonyms/Generic Names: Ligroine; Benzin; Petroleum Naphtha; Naphtha ASTM; Petroleum Spirits

Product Number: 3945

Product Use: Industrial, Manufacturing or Laboratory use

Manufacturer: Columbus Chemical Industries, Inc.
N4335 Temkin Rd.
Columbus, WI. 53925

For More Information: 920-623-2140 (Monday-Friday 8:00-4:30)
www.columbuschemical.com

In Case of Emergency Call: CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

2. HAZARDS IDENTIFICATION

OSHA Hazards: Flammable liquid, Target organ effect, Carcinogen, Mutagen

Target Organs: Central nervous system, Heart, Respiratory system, Eyes

Signal Words: Danger

Pictograms:



GHS Classification:

Flammable liquid	Category 1
Aspiration hazard	Category 1
Carcinogenicity	Category 1B
Germ cell mutagenicity	Category 1B
Reproductive toxicity	Category 2
Skin irritation	Category 2
Chronic aquatic toxicity	Category 2
Specific target organ toxicity – single exposure	Category 3

GHS Label Elements, including precautionary statements:

Hazard Statements:

H224	Extremely flammable liquid and vapor.
H304	May be fatal if swallowed and enters airways.
H350	May cause cancer.
H340	May cause genetic defects.

H360	Suspected of damaging fertility or the unborn child.
H315	Causes skin irritation.
H411	Toxic to aquatic life with long lasting effects.

Precautionary Statements:

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233	Keep container tightly closed.
P240	Ground/Bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P331	Do NOT induce vomiting.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P370+P378	In case of fire: Use appropriate media to extinguish.
P391	Collect spillage.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local regulations.

Potential Health Effects

Eyes	Causes eye irritation.
Inhalation	May be harmful if inhaled. Causes respiratory tract irritation. Vapors may cause drowsiness and dizziness.
Skin	May be harmful if absorbed through skin. Causes skin irritation.
Ingestion	May be harmful if swallowed. Aspiration hazard if swallowed – can enter lungs and cause damage.

NFPA Ratings

Health	1
Flammability	4
Reactivity	0
Specific hazard	Not Available

HMIS Ratings

Health	1
Fire	4
Reactivity	0
Personal	Not Available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight %	CAS #	EINECS# / ELINCS#	Formula	Molecular Weight
Petroleum Ether	>90	8032-32-4	232-453-7	Mixture	Mixture

4. FIRST-AID MEASURES

Eyes	Rinse with plenty of water for at least 15 minutes and seek medical attention.
Inhalation	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

Skin	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention.
Ingestion	Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention.

5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media	Flammable liquid. Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide on fires involving this product. Use appropriate media on adjacent fires. Cool unopened containers with water.
Special protective equipment and precautions for firefighters	In the event of a fire, wear full protective clothing and NIOSH/MSHA-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.
Specific hazards arising from the chemical	Emits toxic fumes (carbon oxides) under fire conditions. Vapor can cause flash fire. Vapors are heavier than air and may travel long distances along the ground to and ignition source and flash back.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	See section 8 for recommendations on the use of personal protective equipment.
Environmental precautions	Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.
Methods and materials for containment and cleaning up	Absorb spill with noncombustible absorbent material, then place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Use with adequate ventilation and grounding. Wash thoroughly after using. Keep container closed when not in use.

Conditions for safe storage, including any incompatibilities

Keep in tightly closed plainly-labeled containers, stored in a cool, dry, ventilated area. Protect against physical damage. Keep away from heat, sparks, and flame. Maintain adequate ventilation. Ground all equipment containing this material.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls: Ventilation and appropriate grounding of containers.

Component	Exposure Limits	Basis	Entity
Petroleum Ether	300 ppm 1350 mg/m ³	TWA	OSHA
	400 ppm 1800 mg/m ³	STEL	OSHA

TWA: Time Weighted Average over 8 hours of work.

TLV: Threshold Limit Value over 8 hours of work.

REL: Recommended Exposure Limit

PEL: Permissible Exposure Limit
STEL: Short Term Exposure Limit during x minutes.
IDLH: Immediately Dangerous to Life or Health
WEEL: Workplace Environmental Exposure Levels
CEIL: Ceiling

Personal Protection

Eyes	Wear chemical safety glasses or goggles, and face shield.
Inhalation	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.
Skin	Wear nitrile or rubber gloves, and full body covering. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Other	Not Available

Other Recommendations

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	Transparent, colorless liquid
Odor	Light hydrocarbons or gasoline
Odor threshold	Not Available
pH	Not Available
Melting point/freezing point	<-73 °C (<-99 °F)
Initial boiling point and boiling range	35 - 60 °C (95 - 140 °F)
Flash point	-18 °C (-0.4 °F) - Closed Cup
Evaporation rate	>1.0
Flammability (solid, gas)	Not Available
Upper/lower flammability or explosive limit	1.1-5.9%
Vapor pressure	53.3 hPa (40.0 mmHg) at 20.0 °C (68.0 °F)
Vapor density	2.5
Specific gravity	0.6400
Solubility (ies)	Negligible
Partition coefficient: n-octanol/water	Not Available
Auto-ignition temperature	Not Available
Decomposition temperature	Not Available

10. STABILITY AND REACTIVITY

Chemical Stability	Stable
Possibility of Hazardous Reactions	Will not occur.
Conditions to Avoid	Keep away from heat, ignition sources, fire.
Incompatible Materials	Strong acids, extreme heat, strong alkalis, strong oxidizing agents and strong oxidizing conditions.
Hazardous Decomposition Products	Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Skin	Not Available
Eyes	Not Available
Respiratory	LC50 – Inhalation – rat – 3400 ppm – 4 hr

Ingestion	Not Available
Other	LD50 – Intravenous – mouse – 40 mg/kg

Carcinogenicity

IARC	Group 2B: Possibly carcinogenic to humans (petroleum ether).
ACGIH	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP	No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Signs & Symptoms of Exposure

Eyes	Vapors may cause irritation. Splashes may cause redness and pain.
Inhalation	Inhalation may cause symptoms of intoxication and peripheral nerve disorders and central nervous system depression. Symptoms of overexposure include loss of appetite, muscle weakness, impairment of motor action, dizziness and drowsiness. May also cause throat irritation.
Skin	May cause irritation. The liquid acts as a defatting agent on the skin.
Ingestion	Local irritation with burning sensation in mouth, esophagus, and stomach. Vomiting, blurred vision, and diarrhea may also occur. Cases of chemical pneumonia have been reported from ingestion of this substance. Nervous system disorders paralleling those from inhalation exposure may also occur.

Chronic Toxicity	Prolonged overexposure may cause drying and cracking of the skin and associated dermatitis. No chronic systematic effects have been reported from widespread industrial use.
Teratogenicity	Not Available
Mutagenicity	Not Available
Embryotoxicity	Not Available
Specific Target Organ Toxicity	Not Available
Reproductive Toxicity	Not Available
Respiratory/Skin Sensitization	Not Available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Aquatic Vertebrate	Not Available
Aquatic Invertebrate	EC50 – Daphnia magna (water flea) – 9.74 mg/l – 48 hours
Terrestrial	Not Available

Persistence and Degradability	Not Available
Bioaccumulative Potential	Not Available
Mobility in Soil	Not Available
PBT and vPvB Assessment	Not Available
Other Adverse Effects	Toxic to aquatic life.

13. DISPOSAL CONSIDERATIONS

Waste Product or Residues	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product or residue.
Product Containers	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

14. TRANSPORTATION INFORMATION

US DOT	UN1268, Petroleum distillates, n.o.s., 3, pg II
TDG	UN1268, PETROLEUM DISTILLATES, N.O.S., 3, PG II
IMDG	UN1268, PETROLEUM DISTILLATES, N.O.S., 3, PG II
Marine Pollutant	No
IATA/ICAO	UN1268, Petroleum distillates, n.o.s., 3, pg II

15. REGULATORY INFORMATION

TSCA Inventory Status	All ingredients are listed on the TSCA inventory.
DSCL (EEC)	All ingredients are listed on the DSCL inventory.
California Proposition 65	Not Listed
SARA 302	Not Listed
SARA 304	Not Listed
SARA 311	Fire Hazard, Chronic Health Hazard
SARA 312	Fire Hazard, Chronic Health Hazard
SARA 313	Not Listed
WHMIS Canada	Class B-2: Flammable and combustible liquid- Flammable liquid Class D-2B: Poisonous and infectious material- Other effects- Toxic

16. OTHER INFORMATION

Revision	Date
Revision 1	07/27/2011
Revision 2	03/25/2014
Revision 3	08/19/2014
Revision 4	03/02/2015
Revision 5	02/01/2018

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