



Material Safety Data Sheet

Creation Date 11-Feb-2010

Revision Date 11-Feb-2010

Revision Number 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	Petroleum Ether
Cat No.	E120-4; E120-4LC; E120SK-4; E120SS-50; E139-1; E139-4; E139-20; E139-200; E139-500; E139FB-19; E139FB-50; E139FB-115; E139FB-200; E139RB-50; E139RB-115; E139RB-200; E139RS-19; E139RS-28; E139RS-50; E139RS-115; E139RS-200; E139S-4; E139SK-4; E139SS-28; E139SS-50; E139SS-200; P480-4; P480-4LC; P480RS-19; P480RS-28; P480RS-50; P480RS-115; P480RS-200; P480SS-28; P480SS-50; P480SS-115; P480SS-200; P481RS-200; P481SS-200
Synonyms	Ligroine; Benzine; Naphtha Petroleum; Naphtha Solvent (Optima/Pesticide/Certified ACS)
Recommended Use	Laboratory chemicals
Company Fisher Scientific One Reagent Lane Fair Lawn, NJ 07410 Tel: (201) 796-7100	Emergency Telephone Number CHEMTREC®, Inside the USA: 800-424-9300 CHEMTREC®, Outside the USA: 703-527-3887

2. HAZARDS IDENTIFICATION

DANGER!

Emergency Overview

Flammable liquid and vapor. Cancer hazard. May cause heritable genetic damage. May cause eye, skin, and respiratory tract irritation. Inhalation may cause central nervous system effects. Aspiration hazard if swallowed - can enter lungs and cause damage.

Appearance Colorless

Physical State Liquid

odor Petroleum distillates

Target Organs Central nervous system (CNS)

Potential Health Effects

Acute Effects

Principle Routes of Exposure

Eyes
Skin

May cause irritation.
May cause irritation. May be harmful in contact with skin.

Inhalation	May cause irritation of respiratory tract. Inhalation may cause central nervous system effects. May be harmful if inhaled.
Ingestion	Aspiration hazard. May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Chronic Effects	May cause cancer. May cause heritable genetic damage. Experiments have shown reproductive toxicity effects on laboratory animals.

See Section 11 for additional Toxicological information.

Aggravated Medical Conditions Central nervous system disorders. Preexisting eye disorders. Skin disorders.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Haz/Non-haz

Component	CAS-No	Weight %
Ligroine	8032-32-4	100

4. FIRST AID MEASURES

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device. Get medical attention immediately if symptoms occur.
Ingestion	Do not induce vomiting. Call a physician or Poison Control Center immediately.
Notes to Physician	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flash Point	< -17.8°C / < 0°F
Method	No information available.
Autoignition Temperature	287.8°C / 550°F
Explosion Limits	
Upper	5.9 vol %
Lower	1.1 vol %
Suitable Extinguishing Media	CO ₂ , dry chemical, dry sand, alcohol-resistant foam. Cool closed containers exposed to fire with water spray.
Unsuitable Extinguishing Media	Water may be ineffective.
Hazardous Combustion Products	No information available.
Sensitivity to mechanical impact	No information available.
Sensitivity to static discharge	No information available.

Specific Hazards Arising from the Chemical

Flammable. Risk of ignition. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Containers may explode when heated.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

NFPA **Health 1** **Flammability 3** **Instability 0** **Physical hazards N/A**

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Use personal protective equipment. Remove all sources of ignition. Take precautionary measures against static discharges. Avoid contact with skin, eyes and clothing.

Environmental Precautions Should not be released into the environment.

Methods for Containment and Clean Up Remove all sources of ignition. Soak up with inert absorbent material. Take precautionary measures against static discharges. Keep in suitable and closed containers for disposal.

7. HANDLING AND STORAGE

Handling Use only under a chemical fume hood. Use explosion-proof equipment. Wear personal protective equipment. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing.

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition. Keep under nitrogen. Flammables area.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Measures Use only under a chemical fume hood. Use explosion-proof electrical/ventilating/lighting/equipment. Ensure that eyewash stations and safety showers are close to the workstation location.

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ligroine	TWA: 300 ppm	(Vacated) TWA: 1350 mg/m ³ (Vacated) TWA: 300 ppm (Vacated) STEL: 1800 mg/m ³ (Vacated) STEL: 400 ppm	TWA: 350 mg/m ³ Ceiling: 1800 mg/m ³

Component	Quebec	Mexico OEL (TWA)	Ontario TWA EV
Ligroine	TWA: 1370 mg/m ³ TWA: 300 ppm	TWA: 1350 mg/m ³ TWA: 300 ppm STEL: 1800 mg/m ³ STEL: 400 ppm	TWA: 1350 mg/m ³

NIOSH IDLH: *Immediately Dangerous to Life or Health*

Personal Protective Equipment

Eye/face Protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure

Respiratory Protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Colorless
odor	Petroleum distillates
Odor Threshold	No information available.
pH	No information available.
Vapor Pressure	No information available.
Vapor Density	No information available.
Viscosity	No information available.
Boiling Point/Range	38°C / 100.4°F
Melting Point/Range	No information available.
Decomposition temperature °C	No information available.
Flash Point	< -17.8°C / < 0°F
Evaporation Rate	Slower than ether
Specific Gravity	No information available.
Solubility	Insoluble in water
log Pow	No data available

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions.
Conditions to Avoid	Heat, flames and sparks.
Incompatible Materials	None known
Hazardous Decomposition Products	Carbon monoxide (CO), Carbon dioxide (CO ₂), Hydrocarbons
Hazardous Polymerization	Hazardous polymerization does not occur
Hazardous Reactions .	None under normal processing.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ligroine	Not listed	Not listed	3400 ppm (Rat) 4 h

Irritation No information available.

Toxicologically Synergistic Products No information available.

Chronic Toxicity

Carcinogenicity The European Union classifies this product as a carcinogen.

Component	ACGIH	IARC	NTP	OSHA	Mexico
Ligroine	A3	Not listed	Not listed	Not listed	Not listed

ACGIH: (American Conference of Governmental Industrial Hygienists)

A1 - Known Human Carcinogen

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

ACGIH: (American Conference of Governmental Industrial Hygienists)

Sensitization No information available.

Mutagenic Effects No information available.

Reproductive Effects Experiments have shown reproductive toxicity effects on laboratory animals.

Developmental Effects Developmental effects have occurred in experimental animals.

Teratogenicity No information available.

Other Adverse Effects The toxicological properties have not been fully investigated.. See actual entry in RTECS for complete information.

Endocrine Disruptor Information No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

. Do not empty into drains.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Ligroine	EC50 72 h 4700 mg/L	Not listed	Not listed	Not listed

Persistence and Degradability No information available

Bioaccumulation/ Accumulation No information available

Mobility No information available

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

DOT

UN-No UN1268
Proper Shipping Name PETROLEUM DISTILLATES, N.O.S.
Hazard Class 3
Packing Group II

TDG

UN-No UN1268
Proper Shipping Name PETROLEUM DISTILLATES, N.O.S.
Hazard Class 3
Packing Group II

IATA

UN-No UN1268
Proper Shipping Name PETROLEUM DISTILLATES, N.O.S.
Hazard Class 3
Packing Group II

IMDG/IMO

UN-No UN1268
Proper Shipping Name PETROLEUM DISTILLATES, N.O.S.
Hazard Class 3
Packing Group II

15. REGULATORY INFORMATION

International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	CHINA	KECL
Ligroine	X	X	-	232-453-7	-		X	-	X	X	KE-21994 X

Legend:

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

WHMIS Hazard Class

B2 Flammable liquid
D2A Very toxic materials

**16. OTHER INFORMATION**

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Revision Summary "****", and red text indicates revision

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.

End of MSDS