

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Ligroin

Product Number : 333417

Brand : Sigma-Aldrich

Company : Sigma-Aldrich
3050 Spruce Street
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USA

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2. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards

Flammable liquid, Target Organ Effect, Carcinogen

Target Organs

Central nervous system, Respiratory system, Eyes, Skin

GHS Label elements, including precautionary statements

Pictogram



Signal word : Danger

Hazard statement(s)

H225 : Highly flammable liquid and vapour.
H304 : May be fatal if swallowed and enters airways.
H330 : Fatal if inhaled.
H350 : May cause cancer.

Precautionary statement(s)

P201 : Obtain special instructions before use.
P210 : Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P260 : Do not breathe dust/fume/gas/mist/vapours/spray.
P284 : Wear respiratory protection.
P310 : Immediately call a POISON CENTER or doctor/physician.
P331 : Do NOT induce vomiting.

HMIS Classification

Health hazard: 0
Chronic Health Hazard: *
Flammability: 3
Physical hazards: 0

NFPA Rating

Health hazard: 1
Fire: 3
Reactivity Hazard: 0

Potential Health Effects

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation.
Ingestion	Aspiration hazard if swallowed - can enter lungs and cause damage. May be harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : Mineral spirits
Petroleum spirits

CAS-No.	EC-No.	Index-No.	Concentration
Ligroine			
8032-32-4	232-453-7	649-263-00-9	-

4. FIRST AID MEASURES

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

Further information

Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in cool place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value	Control parameters	Update	Basis
Ligroine	8032-32-4	TWA	300 ppm	2008-01-01	USA. ACGIH Threshold Limit Values (TLV)
Remarks	Central Nervous System impairment Upper Respiratory Tract irritation Eye irritation Adopted values or notations enclosed are those for which changes are proposed in the NIC 2009 Revision or addition to the notice of intended changes See Notice of Intended Changes (NIC) Confirmed animal carcinogen with unknown relevance to humans: The agent is carcinogenic in experimental animals at a relatively high dose, by route(s) of administration, at site(s), of histologic type(s), or by mechanism(s) that may not be relevant to worker exposure. Available epidemiologic studies do not confirm an increased risk of cancer in exposed humans. Available evidence does not suggest that the agent is likely to cause cancer in humans except under uncommon or unlikely routes or levels of exposure.				

Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with gloves.

Eye protection

Face shield and safety glasses

Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form liquid
 Colour colourless

Safety data

pH no data available
 Melting point no data available
 Boiling point 60 - 80 °C (140 - 176 °F) - lit.
 Flash point -49 °C (-56 °F) - closed cup
 Ignition temperature 246 °C (475 °F)
 Lower explosion limit 1.1 %(V)
 Upper explosion limit 8 %(V)

Vapour pressure	724.66 hPa (543.54 mmHg) at 20 °C (68 °F) 1,778.33 hPa (1,333.86 mmHg) at 55 °C (131 °F)
Density	0.656 g/cm ³ at 25 °C (77 °F)
Water solubility	no data available

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Vapours may form explosive mixture with air.

Conditions to avoid

Heat, flames and sparks.

Materials to avoid

Strong oxidizing agents

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

11. TOXICOLOGICAL INFORMATION

Acute toxicity

no data available

LC50 Inhalation - rat - 4 h - 3400 ppm

Remarks: Behavioral:Convulsions or effect on seizure threshold. Behavioral:Muscle weakness.

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

This product is or contains a component that has been reported to be probably carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification.

Possible human carcinogen

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component 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 component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure (GHS)

no data available

Specific target organ toxicity - repeated exposure (GHS)

no data available

Aspiration hazard

May be fatal if swallowed and enters airways.

Potential health effects

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion	Aspiration hazard if swallowed - can enter lungs and cause damage. May be harmful if swallowed.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation.

Signs and Symptoms of Exposure

burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting

Additional Information

RTECS: OI6180000

12. ECOLOGICAL INFORMATION**Toxicity**

no data available

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

PBT and vPvB assessment

no data available

Other adverse effects

no data available

13. DISPOSAL CONSIDERATIONS**Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION**DOT (US)**

UN-Number: 1268 Class: 3 Packing group: III

Proper shipping name: Petroleum distillates, n.o.s.

Marine pollutant: No

Poison Inhalation Hazard: No

IMDG

UN-Number: 1268 Class: 3 Packing group: III EMS-No: F-E, S-E

Proper shipping name: PETROLEUM DISTILLATES, N.O.S.

Marine pollutant: No

IATA

UN-Number: 1268 Class: 3 Packing group: III

Proper shipping name: Petroleum distillates, n.o.s.

15. REGULATORY INFORMATION

OSHA Hazards

Flammable liquid, Target Organ Effect, Carcinogen

DSL Status

All components of this product are on the Canadian DSL list.

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Fire Hazard, Chronic Health Hazard

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

Ligroine

CAS-No.
8032-32-4

Revision Date
2007-03-01

New Jersey Right To Know Components

Ligroine

CAS-No.
8032-32-4

Revision Date
2007-03-01

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

Further information

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Co., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.
