Safety Data Sheet

Petroleum Ether

Section 1 Product Description

Product Name: Petroleum Ether
Recommended Use: Science education applications
Synonyms: Lignoise, Varnish Makers and Painters Naphtha, VM&P Naphtha, Petroleum Spirits
Distributor: Carolina Biological Supply Company
2700 York Road, Burlington, NC 27215
1-800-227-1150

Chemical Information:
800-227-1150 (8am-5pm ET M-F)
800-424-9300 (Transportation Spill Response 24 hours)

Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

DANGER

Highly flammable liquid and vapor.

GHS Classification:
Germ Cell Mutagenicity Category 1B, Carcinogenicity Category 1B, Aspiration Hazard Category 1, Flammable Liquid Category 2

Other Safety Precautions: IF exposed or concerned: Get medical advice/attention.

Section 3 Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum ether</td>
<td>8032-32-4</td>
<td>100</td>
</tr>
</tbody>
</table>

Section 4 First Aid Measures

Emergency and First Aid Procedures

Inhalation: In case of accident by inhalation: remove casualty to fresh air and keep at rest.

Eyes: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Skin Contact: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

Ingestion: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

Section 5 Firefighting Procedures

Extinguishing Media: Use dry chemical, CO2 or appropriate foam. Water fog in flooding quantities. Apply water from as far a distance as possible.

Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

Fire and/or Explosion Hazards: Vapors may travel back to ignition source. Closed Containers exposed to heat may explode. If heated above its flashpoint in the presence of air, product can support combustion.

Hazardous Combustion Products: Carbon dioxide, Carbon monoxide

Section 6 Spill or Leak Procedures
Steps to Take in Case Material Is Released or Spilled:

Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this SDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill. Ventilate the contaminated area. Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Shut off ignition sources; including electrical equipment and flames. Do not allow smoking in the area.

Section 7  Handling and Storage

Handling: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/…/equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/protective clothing/eye protection/face protection. Use personal protective equipment as required.

Storage: Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up. Keep container tightly closed in a cool, well-ventilated place.


Section 8  Protection Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH (TWA)</th>
<th>ACGIH (STEL)</th>
<th>OSHA PEL (TWA)</th>
<th>OSHA PEL (STEL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum Ether</td>
<td>N/A</td>
<td>N/A</td>
<td>(Vacated) 300 ppm</td>
<td>(Vacated) 400 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1,350 mg/m3</td>
<td>1,800 mg/m3</td>
</tr>
</tbody>
</table>

Control Parameters

Engineering Measures: Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure.

Personal Protective Equipment (PPE):

Respiratory Protection: Respiratory protection may be required to avoid overexposure when handling this product. General or local exhaust ventilation is the preferred means of protection. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms.

Respirator Type(s): NIOSH approved air purifying respirator with organic vapor cartridge.

Eye Protection: Wear chemical splash goggles when handling this product. Have an eye wash station available.

Skin Protection: Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Gloves: Nitrile

Section 9  Physical Data

Formula: See Section 3
Molecular Weight: Varies
Appearance: Colorless Liquid
Odor: Strong Gasoline-like
Odor Threshold: No data available
pH: No data available
Melting Point: < -73 C
Boiling Point: 20 - 75 C
Flash Point: -18 C
Flammable Limits in Air: 1.1 - 5.9%

Vapor Pressure: 40 mmHg at 20 °C
Evaporation Rate (BuAc=1): Approx. 10
Vapor Density (Air=1): 2.5
Specific Gravity: 0.60 - 0.75
Solubility in Water: Practically Insoluble
Log Pow (calculated): No data available
Autoignition Temperature: 287 C
Decomposition Temperature: No data available
Viscosity: No data available
Percent Volatile by Volume: 100%

Section 10  Reactivity Data

Reactivity: No data available
Chemical Stability: Stable under normal conditions.
Safety Data Sheet

Conditions to Avoid: Temperatures above flash point in combination with sparks, open flames, or other sources of ignition.

Incompatible Materials: Strong oxidizing agents

Hazardous Polymerization: Will not occur

Section 11  Toxicity Data

Symptoms (Acute): No data available
Delayed Effects: No data available

Acute Toxicity:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum ether</td>
<td>8032-32-4</td>
<td>Oral LD50 Mouse &gt; 4300 mg/kg</td>
<td>Oral LD50 Rat &gt; 4300 mg/kg</td>
<td>INHALATION LC50 Rat &gt; 1400 ppm</td>
</tr>
</tbody>
</table>

Carcinogenicity:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>No data available</td>
<td>8032-32-4</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

Chronic Effects:

- Mutagenicity: No evidence of a mutagenic effect.
- Teratogenicity: No evidence of a teratogenic effect (birth defect).
- Sensitization: No evidence of a sensitization effect.
- Reproductive: No evidence of negative reproductive effects.

Target Organ Effects:

- Acute: No data available
- Chronic: No data available

Section 12  Ecological Data

Overview: This material is not expected to be harmful to the ecology.

Mobility: This material is expected to have high mobility in soil. It absorbs weakly to most soil types.

Persistence: Evaporation into atmosphere, Biodegradation

Bioaccumulation: Bioconcentration is not expected to occur.

Degradability: Biodegrades quickly.

Other Adverse Effects: No data

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Eco Toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum ether</td>
<td>8032-32-4</td>
<td>72 HR EC50 PSEUDOKIRCHNERIELLA SUBCAPITATA 4700 MG/L</td>
</tr>
</tbody>
</table>

Section 13  Disposal Information

Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.

Waste Disposal Code(s): If discarded, this product is considered a RCRA ignitable waste, D001.

Section 14  Transport Information

Ground - DOT Proper Shipping Name: UN1268Petroleum Distillates, N.O.S. Class 3P.G. I

Air - IATA Proper Shipping Name: UN1268Petroleum Distillates, N.O.S. Class 3P.G. I

Section 15  Regulatory Information
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TSCA Status: All components in this product are on the TSCA Inventory.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>§ 313 Name</th>
<th>§ 304 RQ</th>
<th>CERCLA RQ</th>
<th>§ 302 TPQ</th>
<th>CAA 112(2) TQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum Ether</td>
<td>8032-32-4</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

California Prop 65: No California Proposition 65 ingredients

Section 16

Revised: 08/21/2018  Replaces: 06/15/2018  Printed: 08-25-2018

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

Glossary

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
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<tbody>
<tr>
<td>ACGIH</td>
<td>American Conference of Governmental Industrial Hygienists</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstract Service Number</td>
</tr>
<tr>
<td>CERCLA</td>
<td>Comprehensive Environmental Response, Compensation, and Liability Act</td>
</tr>
<tr>
<td>DOT</td>
<td>U.S. Department of Transportation</td>
</tr>
<tr>
<td>IARC</td>
<td>International Agency for Research on Cancer</td>
</tr>
<tr>
<td>N/A</td>
<td>Not Available</td>
</tr>
<tr>
<td>NTP</td>
<td>National Toxicology Program</td>
</tr>
<tr>
<td>OSHA</td>
<td>Occupational Safety and Health Administration</td>
</tr>
<tr>
<td>PEL</td>
<td>Permissible Exposure Limit</td>
</tr>
<tr>
<td>ppm</td>
<td>Parts per million</td>
</tr>
<tr>
<td>RCRA</td>
<td>Resource Conservation and Recovery Act</td>
</tr>
<tr>
<td>SARA</td>
<td>Superfund Amendments and Reauthorization Act</td>
</tr>
<tr>
<td>TLV</td>
<td>Threshold Limit Value</td>
</tr>
<tr>
<td>TSCA</td>
<td>Toxic Substances Control Act</td>
</tr>
<tr>
<td>IDLH</td>
<td>Immediately dangerous to life and health</td>
</tr>
</tbody>
</table>