

# SAFETY DATA SHEET

## 1. Identification

**Product identifier:** Petroleum Ether, 30-80 ° C

### Other means of identification

**Synonyms:** Ligroine  
**Product No.:** 4971, 4976, 4980, 4983, 6128, 9265, 9268, 9270, H489

### Recommended use and restriction on use

**Recommended use:** For Laboratory, Research or Manufacturing Use.  
**Restrictions on use:** Not determined.

### Details of the supplier of the safety data sheet

Avantor Performance Materials, LLC  
100 Matsonford Rd, Suite 200  
Radnor, PA 19087

Telephone: Customer Service: 855-282-6867

Fax: Product Information Compliance  
Contact Person: info@avantormaterials.com  
E-mail:

### Emergency telephone number:

CHEMTREC: 1-800-424-9300 within US and Canada (24 hrs/day, 7 days/week)

## 2. Hazard identification

### Hazard Classification

#### Physical Hazards

Flammable liquids	Category 2
Static-accumulating flammable liquid	Category 1

#### Health Hazards

Germ Cell Mutagenicity	Category 1B
Carcinogenicity	Category 1B
Aspiration Hazard	Category 1

### Label Elements

#### Hazard Symbol:



<b>Signal Word:</b>	Danger
<b>Hazard Statement:</b>	Highly flammable liquid and vapor. May be fatal if swallowed and enters airways. May cause genetic defects. May cause cancer.
<b>Precautionary Statements</b>	
<b>Prevention:</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
<b>Response:</b>	IF exposed or concerned: Get medical advice/attention. IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting.
<b>Storage:</b>	Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.
<b>Disposal:</b>	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
<b>Other hazards which do not result in GHS classification:</b>	None.

### 3. Composition/information on ingredients

#### Substances

Chemical name	Common name and synonyms	CAS number	Content in percent (%)*
Petroleum Ether		8032-32-4	100,00%

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

### 4. First-aid measures

<b>General information:</b>	Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in attendance.
<b>Ingestion:</b>	If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Call a physician or poison control center immediately.
<b>Inhalation:</b>	Move to fresh air. Get medical attention if symptoms persist.
<b>Skin Contact:</b>	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician or poison control center immediately. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.
<b>Eye contact:</b>	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention immediately.

#### Most important symptoms/effects, acute and delayed

**Symptoms:** Irritating to eyes, respiratory system and skin.

**Hazards:** Irritant.

**Indication of immediate medical attention and special treatment needed**

**Treatment:** Treat symptomatically. Symptoms may be delayed.

**5. Fire-fighting measures**

**General Fire Hazards:** Flammable liquid and vapor. Fire may produce irritating, corrosive and/or toxic gases.

**Suitable (and unsuitable) extinguishing media**

**Suitable extinguishing media:** Foam, carbon dioxide or dry powder.

**Unsuitable extinguishing media:** Water may be ineffective in fighting the fire.

**Specific hazards arising from the chemical:** Heat may cause the containers to explode. Vapors are flammable and heavier than air. Vapors may travel across the ground and reach remote ignition sources causing a flashback fire danger.

**Special protective equipment and precautions for firefighters**

**Special fire fighting procedures:** Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to flames with water until well after the fire is out.

**Special protective equipment for fire-fighters:** Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

**6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures:** Keep unauthorized personnel away. Keep upwind. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Ventilate closed spaces before entering them. Use personal protective equipment. See Section 8 of the SDS for Personal Protective Equipment.

**Methods and material for containment and cleaning up:** In case of leakage, eliminate all ignition sources. Use non-sparking tools. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. Dike far ahead of larger spill for later recovery and disposal.

**Notification Procedures:** Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. Inform authorities if large amounts are involved.

**Environmental Precautions:** Prevent further leakage or spillage if safe to do so. Do not contaminate water sources or sewer. Avoid discharge into drains, water courses or onto the ground.

**7. Handling and storage**

**Precautions for safe handling:** Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Do not eat, drink or smoke when using the product. Wash hands thoroughly after handling. Avoid contact with eyes, skin, and clothing.

**Conditions for safe storage, including any incompatibilities:** Keep containers tightly closed. Store away from heat and light. Store in a cool, dry place with adequate ventilation. Keep away from incompatible materials, open flames, and high temperatures.

**8. Exposure controls/personal protection**

**Control Parameters**

**Occupational Exposure Limits**

Chemical Identity	Type	Exposure Limit Values	Source
Petroleum Ether	TWA	300 ppm 1.400 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)
Petroleum Ether	8 HR ACL	300 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
	15 MIN ACL	375 ppm	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)
Petroleum Ether	TWA	300 ppm 1.370 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)

**Appropriate Engineering Controls** Provide adequate ventilation if fumes or vapors are generated. Explosion-proof general and local exhaust ventilation.

**Individual protection measures, such as personal protective equipment**

**General information:** Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the immediate work area.

**Eye/face protection:** Wear safety glasses with side shields (or goggles).

**Skin Protection**

**Hand Protection:** Chemical resistant gloves

**Other:** Wear suitable protective clothing.

**Respiratory Protection:** In case of inadequate ventilation use suitable respirator. Chemical respirator with organic vapor cartridge and full facepiece.

**Hygiene measures:** Provide eyewash station and safety shower. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Avoid contact with eyes, skin, and clothing.

**9. Physical and chemical properties**

## Appearance

<b>Physical state:</b>	Liquid
<b>Form:</b>	Liquid
<b>Color:</b>	Colorless
<b>Odor:</b>	No data available.
<b>Odor threshold:</b>	No data available.
<b>pH:</b>	No data available.
<b>Melting point/freezing point:</b>	-73 °C
<b>Initial boiling point and boiling range:</b>	No data available.
<b>Flash Point:</b>	< -40 °C (Closed Cup)
<b>Evaporation rate:</b>	No data available.
<b>Flammability (solid, gas):</b>	Class IB Flammable Liquid
<b>Upper/lower limit on flammability or explosive limits</b>	
<b>Flammability limit - upper (%):</b>	5,9 %(V)
<b>Flammability limit - lower (%):</b>	1,1 %(V)
<b>Explosive limit - upper (%):</b>	No data available.
<b>Explosive limit - lower (%):</b>	No data available.
<b>Vapor pressure:</b>	5,33 kPa (20 °C)
<b>Vapor density:</b>	No data available.
<b>Density:</b>	No data available.
<b>Relative density:</b>	No data available.
<b>Solubility(ies)</b>	
<b>Solubility in water:</b>	Insoluble
<b>Solubility (other):</b>	benzene: Miscible carbon disulfide: Miscible carbon tetrachloride: Miscible chloroform: Miscible ether: Miscible
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Auto-ignition temperature:</b>	280 - 470 °C
<b>Decomposition temperature:</b>	No data available.
<b>Viscosity:</b>	< 1 mm <sup>2</sup> /s (37,8 °C)

## 10. Stability and reactivity

<b>Reactivity:</b>	No dangerous reaction known under conditions of normal use.
<b>Chemical Stability:</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions:</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid:</b>	Heat, sparks, flames. Sunlight. Contact with incompatible materials.
<b>Incompatible Materials:</b>	Strong oxidizing agents. May attack some plastics, rubber and coatings.
<b>Hazardous Decomposition Products:</b>	Oxides of Carbon.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation:</b>	None known or expected under normal use.
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<b>Skin Contact:</b>	Prolonged skin contact may cause temporary irritation.
<b>Eye contact:</b>	Spray and vapor in the eyes may cause irritation and smarting.
<b>Ingestion:</b>	May irritate and cause stomach pain, vomiting and diarrhoea. May be fatal if swallowed and enters airways.

**Information on toxicological effects**

**Acute toxicity (list all possible routes of exposure)**

<b>Oral</b>	
<b>Product:</b>	LD 50 (Rat): > 5.000 mg/kg
<b>Dermal</b>	
<b>Product:</b>	LD 50 (Rabbit): > 2.000 mg/kg
<b>Inhalation</b>	
<b>Product:</b>	LC 50 (Rat): > 5.250 mg/m3

<b>Repeated dose toxicity</b>	
<b>Product:</b>	No data available.

<b>Skin Corrosion/Irritation</b>	
<b>Product:</b>	Prolonged skin contact may cause temporary irritation.

<b>Serious Eye Damage/Eye Irritation</b>	
<b>Product:</b>	Vapor or spray in the eyes may cause irritation and smarting.

<b>Respiratory or Skin Sensitization</b>	
<b>Product:</b>	Not a skin nor a respiratory sensitizer.

<b>Carcinogenicity</b>	
<b>Product:</b>	May cause cancer.

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**  
No carcinogenic components identified

**US. National Toxicology Program (NTP) Report on Carcinogens:**  
No carcinogenic components identified

**ACGIH Carcinogen List:**  
No carcinogenic components identified

**Germ Cell Mutagenicity**

<b>In vitro</b>	
<b>Product:</b>	No mutagenic components identified
<b>In vivo</b>	
<b>Product:</b>	May cause genetic defects.

<b>Reproductive toxicity</b>	
<b>Product:</b>	No components toxic to reproduction

<b>Specific Target Organ Toxicity - Single Exposure</b>	
<b>Product:</b>	None known.

**Specific Target Organ Toxicity - Repeated Exposure**

**Product:** None known.

**Aspiration Hazard**

**Product:** May be fatal if swallowed and enters airways.

**Other effects:** None known.

<b>12. Ecological information</b>
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**Ecotoxicity:**

**Acute hazards to the aquatic environment:**

**Fish**

**Product:** No data available.

**Aquatic Invertebrates**

**Product:** No data available.

**Chronic hazards to the aquatic environment:**

**Fish**

**Product:** No data available.

**Aquatic Invertebrates**

**Product:** No data available.

**Toxicity to Aquatic Plants**

**Product:** No data available.

**Persistence and Degradability**

**Biodegradation**

**Product:** There are no data on the degradability of this product.

**BOD/COD Ratio**

**Product:** No data available.

**Bioaccumulative potential**

**Bioconcentration Factor (BCF)**

**Product:** No data available on bioaccumulation.

**Partition Coefficient n-octanol / water (log Kow)**

**Product:** No data available.

**Mobility in soil:** The product is insoluble in water and will spread on the water surface.

**Other adverse effects:** There are no data on the ecotoxicity of this product.

<b>13. Disposal considerations</b>
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**Disposal instructions:** Discharge, treatment, or disposal may be subject to national, state, or local laws.

**Contaminated Packaging:** Since emptied containers retain product residue, follow label warnings even after container is emptied.

## 14. Transport information

### TDG

UN Number:	UN 1268
UN Proper Shipping Name:	PETROLEUM DISTILLATES, N.O.S.
Transport Hazard Class(es)	
Class:	3
Label(s):	3
Packing Group:	II
Marine Pollutant:	No
Special precautions for user:	Not determined.

### IMDG

UN Number:	UN 1268
UN Proper Shipping Name:	PETROLEUM DISTILLATES, N.O.S.
Transport Hazard Class(es)	
Class:	3
Label(s):	3
EmS No.:	F-E, S-E
Packing Group:	II
Marine Pollutant:	No
Special precautions for user:	Not determined.

### IATA

UN Number:	UN 1268
UN Proper Shipping Name:	Petroleum distillates, n.o.s.
Transport Hazard Class(es):	
Class:	3
Label(s):	3
Packing Group:	II
Marine Pollutant:	No
Special precautions for user:	Not determined.
Cargo aircraft only:	Allowed.

Transport in bulk according to Annex II of MARPOL and the IBC Code: Not applicable

## 15. Regulatory information

### Canada Federal Regulations

#### List of Toxic Substances (CEPA, Schedule 1)

Not Regulated

#### Export Control List (CEPA 1999, Schedule 3)

Not Regulated

#### National Pollutant Release Inventory (NPRI)

##### Canada. National Pollutant Release Inventory (NPRI) Substances, Part 5, VOCs with Additional Reporting Requirements

NPRI PT5                      Petroleum Ether

##### Canada. National Pollutant Release Inventory (NPRI) (Schedule 1, Parts 1-4)

NPRI                              Not Regulated

### Greenhouse Gases

Not Regulated

### Controlled Drugs and Substances Act

CA CDSI                              Not Regulated



CA CDSII	Not Regulated
CA CDSIII	Not Regulated
CA CDSIV	Not Regulated
CA CDSV	Not Regulated
CA CDSVII	Not Regulated
CA CDSVIII	Not Regulated

**Precursor Control Regulations**

Not Regulated

**International regulations**

**Montreal protocol**

Not applicable

**Stockholm convention**

Not applicable

**Rotterdam convention**

Not applicable

**Kyoto protocol**

Not applicable

**Inventory Status:**

Australia AICS:	On or in compliance with the inventory
Canada DSL Inventory List:	On or in compliance with the inventory
China Inv. Existing Chemical Substances:	On or in compliance with the inventory
Japan (ENCS) List:	Not in compliance with the inventory.
Japan ISHL Listing:	Not in compliance with the inventory.
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory
Mexico INSQ:	On or in compliance with the inventory
New Zealand Inventory of Chemicals:	On or in compliance with the inventory
Philippines PICCS:	On or in compliance with the inventory
Taiwan Chemical Substance Inventory:	On or in compliance with the inventory
US TSCA Inventory:	On or in compliance with the inventory
EINECS, ELINCS or NLP:	On or in compliance with the inventory

**16. Other information**

**Revision Date:** 28.01.2021

**Version #:** 1.3

**Source of information:** Sources of information used in preparing this SDS included one or more of the following: results from in house or supplier toxicology studies, information from the Toxicology Data Network (TOXNET), European Chemical Agency (ECHA) substance dossiers, IARC Monographs, US National Toxicology Program data, the Agency for Toxic Substances and Disease Registry, other manufacturer's SDSs and other sources, as appropriate.

**Further Information:** No data available.

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