

## SAFETY DATA SHEET

According to JIS Z 7253:2012  
**Revision Date** 10-Jan-2019  
 Version 7.02

## Section 1: PRODUCT AND COMPANY IDENTIFICATION

<b>Product name</b>	Petroleum Ether
<b>Product code</b>	167-00807,161-00805
<b>CAS No</b>	8032-32-4

<b>Manufacturer</b>	FUJIFILM Wako Pure Chemical Corporation 1-2 Doshomachi 3-Chome Chuo-ku, Osaka 540-8605, Japan Phone: +81-6-6203-3741 Fax: +81-6-6203-5964
<b>Supplier</b>	FUJIFILM Wako Pure Chemical Corporation 1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan Phone: +81-6-6203-3741 Fax: +81-6-6203-2029
<b>Emergency telephone number</b>	+81-6-6203-3741 / +81-3-3270-8571
<b>Recommended uses and restrictions on use</b>	For research purposes
<b>Announcement of company name change</b>	Company name has changed since April 1, 2018. Former name was "Wako Pure Chemical Industries, Ltd."

## Section 2: HAZARDS IDENTIFICATION

## GHS classification

Classification of the substance or mixture

Flammable liquids

Category 2

Aspiration hazard

Category 1

Acute toxicity - Inhalation (Vapors)

Category 4

Skin corrosion/irritation

Category 2

Serious eye damage/eye irritation

Category 2A

Specific target organ toxicity (single exposure)

Category 3

Category 3 Respiratory tract irritation, Narcotic effects

Specific target organ toxicity (repeated exposure)

Category 1

Category 1 nervous system

## Pictograms



Signal word

Danger

## Hazard statements

H225 - Highly flammable liquid and vapor

H315 - Causes skin irritation

- H319 - Causes serious eye irritation  
 H332 - Harmful if inhaled  
 H335 - May cause respiratory irritation  
 H336 - May cause drowsiness or dizziness  
 H304 - May be fatal if swallowed and enters airways  
 H372 - Causes damage to the following organs through prolonged or repeated exposure: nervous system

**Precautionary statements-(Prevention)**

- Use only outdoors or in a well-ventilated area
- Wash face, hands and any exposed skin thoroughly after handling
- Wear protective gloves/protective clothing/eye protection/face protection
- Do not breathe dust/fume/gas/mist/vapors/spray
- Do not eat, drink or smoke when using this product
- 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
- Keep cool

**Precautionary statements-(Response)**

- Get medical advice/attention if you feel unwell
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical advice/attention.
- If skin irritation occurs: Get medical advice/attention
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- Wash contaminated clothing before reuse.
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- Call a POISON CENTER or doctor/physician if you feel unwell.
- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
- Do NOT induce vomiting.
- In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction

**Precautionary statements-(Storage)**

- Store locked up.
- Store in a well-ventilated place. Keep container tightly closed

**Precautionary statements-(Disposal)**

- Dispose of contents/container to an approved waste disposal plant

**Others**

**Other hazards** Not available

### Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

**Single Substance or Mixture** Mixture

Chemical Name	Weight-%	Molecular weight	ENCS	ISHL No.	CAS No.
Ligroine(Petroleum Ether)	90 ( v/v%,Boiling Range 30-60 )	N/A	2-6	2-6	8032-32-4

**Impurities and/or Additives :** Not applicable

**Substances Remarks:** This Product includes the following componets. n-Hexane about 20%

### Section 4: FIRST AID MEASURES

**Inhalation**

Remove to fresh air. If symptoms persist, call a physician.

**Skin contact**

Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.

**Eye contact**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediate medical attention is required.

**Ingestion**

Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Do not induce vomiting without medical advice.

**Protection of first-aiders**

Use personal protective equipment as required.

**Section 5: FIRE FIGHTING MEASURES****Suitable extinguishing media**

Water spray (fog), Carbon dioxide (CO<sub>2</sub>), Foam, Extinguishing powder, Sand

**Unsuitable extinguishing media**

No information available

**Special extinguishing method**

No information available

**Specific hazards arising from the chemical product**

Thermal decomposition can lead to release of irritating and toxic gases and vapors. Vapors may form explosive mixture with air

**Protection of fire-fighters**

Use personal protective equipment as required. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

**Section 6: ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

For indoor, provide adequate ventilation process until the end of working. Deny unnecessary entry other than the people involved by, for example, using a rope. While working, wear appropriate protective equipments to avoid adhering it on skin, or inhaling the gas. Work from windward, and retract the people downwind.

**Environmental precautions**

To be careful not discharged to the environment without being properly handled waste water contaminated.

**Methods and materials for contaminant and methods and materials for cleaning up**

Absorb dry sand, earth, sawdust and the waste. Collect empty container that can be sealed.

**Recovery, neutralization**

No information available

**Secondary disaster prevention measures**

Clean contaminated objects and areas thoroughly observing environmental regulations.

**Section 7: HANDLING AND STORAGE****Handling****Technical measures**

Highly flammable. Avoid contact with high temperature objects, spark, and strong oxidizing agents. Use with local exhaust ventilation.

**Precautions**

Do not rough handling containers, such as upsetting, falling, giving a shock, and dragging. Prevent leakage, overflow, and scattering. Not to generate steam and dust in vain. Seal the container after use. After handling, wash hands and face, and then gargle. In places other than those specified, should not be smoking or eating and drinking. Should not be brought contaminated protective equipment and gloves to rest stops. Deny unnecessary entry of non-emergency personnel to the handling area.

**Safety handling precautions**

Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use personal

protective equipment as required. Avoid contact with skin, eyes or clothing.

**Storage****Safe storage conditions****Storage conditions**

Store away from sunlight in well-ventilated place at room temperature (preferably cool).  
Keep container tightly closed.

**Safe packaging material**

Glass, Iron

**Incompatible substances**

Strong oxidizing agents

## Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering controls**

In case of indoor workplace, seal the source or use a local exhaust system. Provide the safety shower facility, and hand- and eye-wash facility. And display their position clearly.

**Exposure limits**

Chemical Name	JSOH (Japan)	ISHL (Japan)	ACGIH
Ligroine(Petroleum Ether) 8032-32-4	40ppm, 140mg/m <sup>3</sup> ; Hexane skin 100ppm, 300mg/m <sup>3</sup> ; Gasoline	N/A	TWA 500ppm, 1760mg/m <sup>3</sup> STEL 1000ppm, 3500mg/m <sup>3</sup> MAK;50ppm
Hexane 110-54-3	40ppm, 140mg/m <sup>3</sup> ; skin	ISHL/ACL: 40 ppm	TWA: 50 ppm Skin

**Personal protective equipment****Respiratory protection**

gas mask for organic gas

**Hand protection**

Impermeable protective gloves

**Eye protection**

protective eyeglasses or chemical safety goggles

**Skin and body protection**

Long-sleeved work clothes

**General hygiene considerations**

Handle in accordance with good industrial hygiene and safety practice.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

**Form****Color**

colorless

**Turbidity**

clear

**Appearance**

liquid

**Odor**

characteristic odor

**pH**

No data available

**Melting point/freezing point**

-73 °C

**Boiling point, initial boiling point and boiling range**

30 - 60 °C

**Flash point**

-17.8 °C / 0 °F

**Evaporation rate:**

No data available

**Flammability (solid, gas):**

No data available

**Upper/lower flammability or explosive limits****Upper :**

5.9 v/v%

**Lower :**

1.1 v/v%

**Vapour pressure**

No data available

**Vapour density**

2.5 (air = 1)

**Specific Gravity / Relative density**

0.620 - 0.660g/ml

**Solubilities**

Ethanol and Diethyl ether : Very soluble. water : practically insoluble, or insoluble .

**n-Octanol/water partition coefficient:(log Pow)**

No data available

**Auto-ignition temperature:**

246 °C / 475 °F

**Decomposition temperature:**

No data available

**Viscosity (coefficient of viscosity)**

No data available

**Dynamic viscosity**

No data available

## Section 10: STABILITY AND REACTIVITY

### Stability

**Stability** Stable under recommended storage conditions.  
**Reactivity** No data available

### Hazardous reactions

None under normal processing

### Conditions to avoid

Extremes of temperature and direct sunlight, Heat, flames and sparks, static electricity, spark

### Incompatible materials

Strong oxidizing agents

### Hazardous decomposition products

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>)

## Section 11: TOXICOLOGICAL INFORMATION

Following components were also described. n-Hexane about 20%

### Acute toxicity

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Ligroine(Petroleum Ether)	>15,875 mg/kg ( Rat )	N/A	> 3,175 mg/kg ( Rabbit )
Hexane	15800, 28700, 32400 mg/kg(Rat)	3297 mg / kg (Rabbit)	N/A

Chemical Name	Acute toxicity -oral- source information	Acute toxicity -dermal- source information	Acute toxicity -inhalation gas-source information
Ligroine(Petroleum Ether)	LD50(oral,rat): > 25.0 ml/Kg (EHC 20, 1982) .	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
Hexane	LD50(oral,rat):15800, 28700, 32400mg/kg [EHC122(1991)]	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.

Chemical Name	Acute toxicity -inhalation vapor- source information	Acute toxicity -inhalation dust-source information	Acute toxicity -inhalation mist-source information
Ligroine(Petroleum Ether)	LC50(ihl,rat): 14000-16000 ppm/4h (EHC 20, 1982) .	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
Hexane	LC50(ihl,rat):48000ppm/4h [ Ministry of the Environment Risk Assessment vol1(2002) ] , LC50(ihl,rat):74000ppm/4h [ EHC122(1991) ] .	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.

### Skin irritation/corrosion

Chemical Name	Skin corrosion irritation source information
Ligroine(Petroleum Ether)	Based on the NITE GHS classification results.
Hexane	Based on the NITE GHS classification results.

### Serious eye damage/ irritation

Chemical Name	Serious eye damage source information
Ligroine(Petroleum Ether)	Based on the NITE GHS classification results.
Hexane	Based on the NITE GHS classification results.

### Respiratory or skin sensitization

Chemical Name	Respiratory, Skin sensitization source information
Ligroine(Petroleum Ether)	Based on the NITE GHS classification results.
Hexane	Based on the NITE GHS classification results.

### Reproductive cell mutagenicity

Chemical Name	Mutagenic source information
Ligroine(Petroleum Ether)	Based on the NITE GHS classification results.

Hexane	Based on the NITE GHS classification results.
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**Carcinogenicity**

Chemical Name	Carcinogenicity source information
Ligroine(Petroleum Ether)	Based on the NITE GHS classification results.
Hexane	Based on the NITE GHS classification results.

**Reproductive toxicity**

Chemical Name	Reproductive toxicity source information
Ligroine(Petroleum Ether)	Based on the NITE GHS classification results.
Hexane	Based on the NITE GHS classification results.

**STOT-single exposure**

Chemical Name	STOT -single exposure- source information
Ligroine(Petroleum Ether)	Based on the NITE GHS classification results.
Hexane	Based on the NITE GHS classification results.

**STOT-repeated exposure**

Chemical Name	STOT -repeated exposure- source information
Ligroine(Petroleum Ether)	Based on the NITE GHS classification results.
Hexane	Based on the NITE GHS classification results.

**Aspiration hazard**

Chemical Name	Aspiration Hazard source information
Ligroine(Petroleum Ether)	Based on the NITE GHS classification results.
Hexane	Based on the NITE GHS classification results.

## Section 12: ECOLOGICAL INFORMATION

Following componets were also described. n-Hexane about 20%

**Ecotoxicity**

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Hexane	N/A	N/A	LC50: <i>Daphnia Magna</i> 3.88 mg/L 48h

**Other data**

Chemical Name	Aquatic toxicity -Acute- source information	Aquatic toxicity -Chronic- source information
Ligroine(Petroleum Ether)	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
Hexane	EC50 ( <i>Daphnia magna</i> ):3.88mg/L/48h(EHC122,1991).	Based on the NITE GHS classification results.

<b>Persistence and degradability</b>	No information available
<b>Bioaccumulative potential</b>	No information available
<b>Mobility in soil</b>	No information available
<b>Hazard to the ozone layer</b>	No information available

## Section 13: DISPOSAL CONSIDERATIONS

**Waste from residues**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated container and contaminated packaging**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

## Section 14: TRANSPORT INFORMATION

**ADR/RID**

UN number	UN1268
Proper shipping name:	Petroleum distillates, n.o.s.
UN classification	3
Subsidiary hazard class	
Packing group	II
Marine pollutant	Not applicable

**IMDG**

UN number	UN1268
Proper shipping name:	Petroleum distillates, n.o.s.
UN classification	3
Subsidiary hazard class	
Packing group	II
Marine pollutant (Sea)	Not applicable
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No information available

**IATA**

UN number	UN1268
Proper shipping name:	Petroleum products, n.o.s.
UN classification	3
Subsidiary hazard class	
Packing group	II
Environmentally Hazardous Substance	Not applicable

<b>Section 15: REGULATORY INFORMATION</b>
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**International Inventories**

EINECS/ELINCS	Listed
TSCA	Listed

**Japanese regulations**

Fire Service Act	Category IV, Class I petroleums, dangerous grade 2
Poisonous and Deleterious Substances Control Law	Not applicable
Industrial Safety and Health Act	Harmful Substances Whose Names Are to be Indicated on the Label (Law Art.57, Para.1, Enforcement Order Art.18) Notifiable Substances (Law Art.57-2, Enforcement Order Art.18-2 Attached Table No.9)No.329,520 Class 2 Organic Solvents (Enforcement Order Attached Table No.6-2, Ordinance on Prevention of Organic Solvent Poisoning Art.1, Para.1, Item 5) Working Environment Evaluation Standards, Administrative Control Levels (Law Art.65-2, Para.1) Dangerous Substances - Flammable Substance (Enforcement Order Attached Table 1 Item 4)
Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc	Priority Assessment Chemical Substances (Law Article 2, Para.5)
Regulations for the carriage and storage of dangerous goods in ship	Flammable Liquids (Ordinance Art.3, Ministry of Transportation Ordinance Regarding Transport by Ship and Storage, Attached Table 1)
Civil Aeronautics Law	Flammable Liquids (Ordinance Art.194, MITL Notification for Air Transportation of Explosives etc., Attached Table 1)
Marine Pollution Prevention Law	Enforcement ordinance Appendix No. 1 Noxious liquid substance Category Y
Pollutant Release and Transfer	Class 1

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**Register Law**

<b>Class 1 - No.</b>	392
<b>Export Trade Control Order</b>	Not applicable
<b>Air Pollution Control Law</b>	Hazardous Air Pollutants

**Section 16: OTHER INFORMATION****Key literature references and sources for data etc.**

NITE: National Institute of Technology and Evaluation (JAPAN)  
<http://www.safe.nite.go.jp/japan/db.html>  
IATA dangerous Goods Regulations  
RTECS:Registry of Toxic Effects of Chemical Substances  
Japan Industrial Safety and Health Association GHS Model SDS  
Dictionary of Synthetic Organic Chemistry, SSOCJ, Koudansha Scientific Co.Ltd.  
Chemical Dictionary, Kyouritsu Publishing Co., Ltd.  
etc

**Disclaimer**

The information provided in 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 guidance for safe handling, and is not to be considered 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 materials or in any process, unless specified in the text.  
GHS Classification is according to JIS Z7252(2014). \*JIS: Japanese Industrial Standards

**Product information**

You might get a product which indicates a former company name, during the period of transition.

**End of Safety Data Sheet**