

## MATERIAL SAFETY DATA SHEET (MSDS)

### PETROLEUM ETHER 60 - 80° C AR (PETROLEUM SPIRIT)

#### 1. Identification of the substance/mixture and of the company/undertaking

##### 1.1. Product identifier

Trade name : PETROLEUM ETHER 60 - 80° C AR (PETROLEUM SPIRIT)

Product code : SS0104402500

Identification of the product : Ligroine  
 CAS No: 8032-32-4  
 EC No :232-453-7  
 Annex No :649-263-00-9

##### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use : Industrial. For professional use only.

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

Company identification SUVCHEM  
 Chaitanya Tower, 2nd Floor, Office # 206,  
 Siddharth Nagar, S.V. Road,  
 Goregaon (West), Mumbai - 400062,  
 Maharashtra, India.  
 Contact: +91 22 28725393 / 94 / 95  
 Email ID: info@suvchem.com/care@suvchem.com

##### 1.4. Emergency telephone number

Phone no. : + 91 22 28725393 / 94 / 95 (9:00am - 6:00 pm) [ Office hours ]

#### 2. Hazards identification -DSD

##### 2.1. Classification of the substance or mixture

##### Classification EC 67/548 or EC 1999/45

Classification : F; R11  
 Carc. Cat. 2; R40  
 Muta. Cat. 2; R68  
 Xn; R65-48/20  
 R67  
 Xi; R38  
 N; R51-53

##### Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Health hazards : Carcinogenicity - Category 1B - Danger (CLP : Carc. 1B) H350  
 Specific Target Organ Toxicity - Single exposure - Narcotic effects - Category 3 -  
 Warning (CLP : STOT SE 3) H336  
 Specific Target Organ Toxicity - Repeated exposure - Category 2 - Warning (CLP :  
 STOT RE 2) H373

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**2. Hazards identification -DSD (continued)**
**Physical hazards**
**Environmental hazards**

Aspiration hazard - Category 1 - Danger (CLP : Asp. Tox. 1) H304  
 Skin irritation - Category 2 - Warning (CLP : Skin Corr. 2) H315  
 Germ cell mutagenicity - Category 1B - Danger (CLP : Muta. 1B) H340  
 : Flammable liquids - Category 2 - Danger (CLP : Flam. Liq. 2) H225  
 : Hazardous to the aquatic environment - Chronic hazard - Category 2 (CLP : Aquatic Chronic 2) H411

**2.2. Label elements**
**Labelling EC 67/548 or EC 1999/45**
**Symbol(s)**

**Symbol(s)**

: F : Highly flammable  
 N : Dangerous for the environment  
 Xn : Harmful

**R Phrase(s)**

: R11 : Highly flammable.  
 R38 : Irritating to skin.  
 R48/20 : Harmful : danger of serious damage to health by prolonged exposure through inhalation.  
 R51/53 : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
 R62 : Possible risk of impaired fertility.  
 R65 : Harmful : may cause lung damage if swallowed.  
 R67 : Vapours may cause drowsiness and dizziness.

**S Phrase(s)**

: S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
 S61 : Avoid release to the environment. Refer to special instructions/Safety data sheets.  
 S62 : If swallowed, do not induce vomiting : seek medical advice immediately and show this container or label.

**Contains**

: Ligroine

**Labelling Regulation EC 1272/2008 (CLP)**
**Hazard pictograms**

**Signal words**

: Danger

**Hazard statements**

: H225 : Highly flammable liquid and vapour.  
 H304 : May be fatal if swallowed and enters airways.  
 H350 : May cause cancer.  
 H340 : May cause genetic defects.

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**2. Hazards identification -DSD (continued)**

H315 : Causes skin irritation.  
 H336 : May cause drowsiness or dizziness.  
 H373 : May cause damage to organs through prolonged or repeated exposure.  
 H411 : Toxic to aquatic life with long lasting effects.

**Precautionary statements**
**• General**

: P201: Obtain special instructions before use.

**• Prevention**

: P240: Ground/bond container and receiving equipment.  
 P241: Use explosion-proof electrical, ventilating, lighting, ..., equipment.  
 P210: Keep away from heat, sparks, open flames or hot surfaces. - No smoking.  
 P280: Wear protective gloves, protective clothing, eye protection, face protection.  
 P271: Use only outdoors or in a well-ventilated area.  
 P260: Do not breathe dust, fume, gas, mist, vapours, spray.  
 P273: Avoid release to the environment.  
 P233: Keep container tightly closed.  
 P264: Wash thoroughly after handling.

**• Response**

: P301+P310: IF SWALLOWED : Immediately call a POISON CENTER or doctor.  
 P302+P352: IF ON SKIN : Wash with plenty of soap and water.  
 P308+P313: If exposed or concerned : get medical advice.  
 P332+P313: If skin irritation occurs : Get medical advice.  
 P391: Collect spillage.  
 P304+P340: IF INHALED : Remove to fresh air and keep at rest in a position comfortable for breathing.  
 P303+P361+P353: IF ON SKIN (or hair) : Remove immediately all contaminated clothing. Rinse skin with water/shower.  
 P363: Wash contaminated clothing before reuse.  
 P314: Get medical advice if you feel unwell.  
 P370+P378: In case of fire: Use for extinction.

**• Storage**

: P403+P233: Store in well-ventilated place. Keep container tightly closed.  
 P403+P235: Store in well-ventilated place. Keep cool.  
 P405: Store locked up.

**• Disposal considerations**

: P501: Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

**Special labelling**

: Restricted to professional users. (Substances which appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008)

**Contains**

: Ligroine

**2.3. Other hazards**
**Other hazards**

: The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

**3. Composition/information on ingredients**
**Substance / Preparation**

: Ligroine

EC No :232-453-7

Annex No :649-263-00-9

CHAITANYA CHS, 2<sup>nd</sup> FLOOR, OFFICE # 206, SIDDHARTH NAGAR, S.V.ROAD, GOREGAON (W), MUMBAI 400062, MH, INDIA.  
 CONTACT: +9122 28725393 /94/ 95 | EMAILID: CARE@SUVCHEM.COM

**MATERIAL SAFETY DATA SHEET (MSDS)**
**PETROLEUM ETHER 60 - 80° C AR (PETROLEUM SPIRIT)**
**3. Composition/information on ingredients (continued)**

Substance.						
Substance name	Contents	CAS No	EC No	Annex No	REACH Ref.	Classification
Ligroine	100 %	8032-32-4	232-453-7	649-263-00-9	----	F; R11 Carc. Cat. 2; R40 Muta. Cat. 2; R68 Xn; R62 Xn; R65-48/20 R67 Xi; R38 N; R51-53 ----- Flam. Liq. 2 _ H225 Carc. 1B _ H350 Muta. 1B _ H340 Asp. Tox 1 _ H304 Skin Irrit. 2 _ H315 STOT RE 2 _ H373 STOT SE 3 _ H336 Aquatic Chronic 2 _ H411

Contains no other components or impurities which will influence the classification of the product.

**4. First aid measures**
**4.1. Description of first aid measures**

Inhalation	: Call a POISON CENTER or doctor if you feel unwell. Remove to fresh air and keep at rest in a position comfortable for breathing.
Skin contact	: Wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Specific treatment (see on this label). Get medical advice. If skin irritation occurs :
Eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
Ingestion	: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting.

**4.2. Most important symptoms and effects, both acute and delayed**

Symptoms relating to use	: May cause cancer. May cause genetic defects. Causes damage to organ. May be fatal if swallowed and enters airways. Causes skin irritation. May cause drowsiness or dizziness.
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**4.3. Indication of any immediate medical attention and special treatment needed**

General information	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
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**5. Fire-fighting measures**
**5.1. Extinguishing media**

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**PETROLEUM ETHER 60 - 80° C AR (PETROLEUM SPIRIT)**
**5. Fire-fighting measures (continued)**

- Suitable extinguishing media** : Foam. Dry powder. Carbon dioxide. Water spray. Sand.  
**Unsuitable extinguishing media** : Do not use a heavy water stream.  
**Surrounding fires** : Use water spray or fog for cooling exposed containers.

**5.2. Special hazards arising from the substance or mixture**

- Flammable class** : Highly flammable liquid and vapour.  
**Hazardous combustion products** : Under fire conditions, hazardous fumes will be present.

**5.3. Advice for fire-fighters**

- Protection against fire** : Do not enter fire area without proper protective equipment, including respiratory protection.  
**Special procedures** : Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.

**6. Accidental release measures**
**6.1. Personal precautions, protective equipment and emergency procedures**

- For emergency responders** : Equip cleanup crew with proper protection.  
 Ventilate area.  
 Avoid breathing dust, fume, gas, mist, vapours, spray.  
**Technical measures** : Use special care to avoid static electric charges.  
**Special precautions** : Remove ignition sources. No naked lights. No smoking.  
**For non-emergency personnel** : Evacuate unnecessary personnel.

**6.2. Environmental precautions**

- Environmental precautions** : Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.  
 Avoid release to the environment.

**6.3. Methods and material for containment and cleaning up**

- Clean up methods** : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

**6.4. Reference to other sections**

See section 8. Exposure controls/personal protection

**MATERIAL SAFETY DATA SHEET (MSDS)**
**PETROLEUM ETHER 60 - 80° C AR (PETROLEUM SPIRIT)**
**7. Handling and storage**
**7.1. Precautions for safe handling**

<b>Handling</b>	: Handle empty containers with care because residual vapours are flammable. Wash thoroughly after handling. Obtain special instructions before use. Eliminate all ignition sources if safe to do so. Use only outdoors or in a well-ventilated area.
<b>Technical protective measures</b>	: Provide good ventilation in process area to prevent formation of vapour. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof electrical, ventilating, lighting, ..., equipment.
<b>Special precautions</b>	: No naked lights. No smoking. Avoid breathing dust, fume, gas, mist, vapours, spray.

**7.2. Conditions for safe storage, including any incompatibilities**

<b>Storage</b>	: Keep only in the original container in a cool, well ventilated place. Keep in fireproof place. Ground/bond container and receiving equipment. Keep container tightly closed.
<b>Storage - away from</b>	: Strong bases. Strong acids. Sources of ignition. Direct sunlight. Heat sources.

**7.3. Specific end use(s)**

<b>Specific end use(s)</b>	: None.
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**8. Exposure controls/personal protection**
**8.1. Exposure controls**

<b>Personal protection</b>	: Avoid all unnecessary exposure.
• <b>Respiratory protection</b>	: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Wear respiratory protection.
• <b>Hand protection</b>	: Wear protective gloves.
• <b>Skin protection</b>	: Wear suitable protective clothing.
• <b>Eye protection</b>	: Chemical goggles or safety glasses.
• <b>Others</b>	: When using, do not eat, drink or smoke.

**8.2. Control parameters**

<b>Occupational Exposure Limits</b>	: No data available.
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**MATERIAL SAFETY DATA SHEET (MSDS)**
**PETROLEUM ETHER 60 - 80° C AR (PETROLEUM SPIRIT)**
**9. Physical and chemical properties**
**9.1. Information on basic physical and chemical properties**

Physical state at 20 °C	: Liquid.
Colour	: Clear Colorless
Odour	: Gasoline or kerosene
Odour threshold	: No data available.
pH value	: No data available.
Melting point [°C]	: < -730C
Decomposition point [°C]	: N/A
Critical temperature [°C]	: N/A
Auto-ignition temperature [°C]	: 2880C
Flammability (solid, gas)	: Flammable. Highly flammable liquid and vapour.
Flash point [°C]	: -40°C
Boiling point [°C]	: 40 - 60 °C
Initial boiling point [°C]	: 40 °C
Final boiling point [°C]	: 60 °C
Evaporation rate	: 10
Vapour pressure [20°C]	: 40 mm Hg @ 20C
Vapour pressure mm/Hg	: 40 mm Hg @ 20C
Vapour density	: 2,5
Density [g/cm3]	: 0.60 - 0.75
Relative density, gas (air=1)	: N/A
Relative density, liquid (water=1)	: N/A
Solubility in water [% weight]	: Insoluble.
Solubility in water	: N/A
Log Pow octanol / water at 20°C	: No data available.
Solubility	: N/A
Viscosity at 40°C [mm2/s]	: N/A

**9.2. Other information**

Explosive properties	: N/A
Explosion limits - upper [%]	: 5,90%
Explosion limits - lower [%]	: 1,10%
Oxidising properties	: No data available.



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**PETROLEUM ETHER 60 - 80° C AR (PETROLEUM SPIRIT)**
**10. Stability and reactivity**
**10.1. Reactivity**

Reactivity : Not established.

**10.2. Chemical stability**

Chemical stability : Stable under recommended storage conditions.

**10.3. Possibility of hazardous reactions**

Hazardous reactions : Not established.

**10.4. Conditions to avoid**

Conditions to avoid : Direct sunlight. Extremely high or low temperatures. Open flame.

**10.5. Incompatible materials**

Materials to avoid : Strong acids. Strong bases.

**10.6. Hazardous decomposition products**

 Hazardous decomposition products : Fumes. Carbon monoxide. Carbon dioxide.  
May release flammable gases.

**11. Toxicological information**
**11.1. Information on toxicological effects**
**Acute toxicity**

- Inhalation : May be fatal if swallowed and enters airways.
- Dermal : Based on available data, the classification criteria are not met.
- Ingestion : May be fatal if swallowed and enters airways.

**Corrosion**

: Based on available data, the classification criteria are not met.

**Irritation**

: Causes skin irritation.

**Sensitization**

: Based on available data, the classification criteria are not met.

**Mutagenicity**

: May cause genetic defects.

**Carcinogenicity**

: May cause cancer.

**Toxic for reproduction**

: Based on available data, the classification criteria are not met.

**STOT-single exposure**

: May cause drowsiness or dizziness.

**STOT-repeated exposure**

: May cause damage to organs through prolonged or repeated exposure.

**Aspiration hazard**

: May be fatal if swallowed and enters airways.



**MATERIAL SAFETY DATA SHEET (MSDS)**
**PETROLEUM ETHER 60 - 80° C AR (PETROLEUM SPIRIT)**
**12. Ecological information**
**12.1. Toxicity**

**Toxicity information** : Toxic to aquatic life with long lasting effects.

**12.2. Persistence - degradability**

**Persistence - degradability** : May cause long-term adverse effects in the environment.

**12.3. Bioaccumulative potential**

**Bioaccumulative potential** : Not established.

**12.4. Mobility in soil**

**Mobility in soil** : Not established.

**12.5. Results of PBT and vPvB assessment**

**Results of PBT and vPvB assessment** : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

**12.6. Other adverse effects**

**Environmental precautions** : Avoid release to the environment.

**13. Disposal considerations**
**13.1. Waste treatment methods**

**General** : Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.  
 Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

**Special precautions** : Handle empty containers with care because residual vapours are flammable.  
 Hazardous waste due to toxicity.

**14. Transport information**
**14.1. Land transport (ADR-RID)**

**Proper shipping name** : PETROLEUM DISTILLATES, N.O.S. or PETROLEUM PRODUCTS, N.O.S. (vapour pressure at 50 °C more than 110 kPa)

**UN N°** : 1268

**MATERIAL SAFETY DATA SHEET (MSDS)**
**PETROLEUM ETHER 60 - 80° C AR (PETROLEUM SPIRIT)**
**14. Transport information (continued)**

H.I. nr : 33  
 ADR - Class : 3  
 Labelling - Transport : 3 : Flammable liquid.



ADR - Classification code : F1  
 ADR - Group : II  
 ADR - Packing instructions : P001  
 ADR - Limited Quantity : 1 L  
 ADR - Tunnel code



: D/E : Bulk or tank carriage: Passage forbidden through tunnels of category D and E. Other carriage: Passage forbidden through tunnels of category E.

**14.2. Sea transport (IMDG) [English only]**

Proper shipping name : PETROLEUM DISTILLATES, N.O.S. or PETROLEUM PRODUCTS, N.O.S. (vapour pressure at 50 °C more than 110 kPa)  
 UN N° : 1268  
 IMO-IMDG - Class or division : 3 : Flammable liquid.  
 IMO-IMDG - Packing group : II  
 IMO-IMDG - Packing instructions : P001  
 IMO-IMDG - Limited quantities : 1 L  
 IMO-IMDG - Marine pollution : Yes  
 EMS-Nr : F-E S-E

**14.3. Air transport (ICAO-IATA) [English only]**

Proper shipping name : PETROLEUM DISTILLATES, N.O.S. or PETROLEUM PRODUCTS, N.O.S. (vapour pressure at 50 °C more than 110 kPa)  
 UN N° : 1268  
 IATA - Class or division : 3 : Flammable liquid.  
 IATA - Packing group : II  
 IATA - Passenger and Cargo Aircraft : ALLOWED  
 - Passenger and Cargo - Packing instruction : 353  
 - Passenger and Cargo - Maximum Quantity/Packing : 5 L

**MATERIAL SAFETY DATA SHEET (MSDS)**
**PETROLEUM ETHER 60 - 80° C AR (PETROLEUM SPIRIT)**
**14. Transport information (continued)**

IATA - Cargo only	: ALLOWED
- Cargo only - Packing instruction	: 364
- Cargo only - Maximum Quantity/ Packing	: 60 L
IATA - Limited Quantities	: 1 L
ERG-Nr	: 3H

**15. Regulatory information**
**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Safety, health and environmental regulations/legislation specific for the substance or mixture	: Ensure all national/local regulations are observed.
REACH Restrictions - Annex XVII	: With the exception of those listed below: The components of this product are not subject to restrictions. Annex XVII
REACH Authorisation - Annex XIV	: The components of this product are not subject to authorization.

**15.2. Chemical Safety Assessment**

Chemical Safety Assessment	: It has not been carried out.
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**16. Other information**

Revision	: Revision - See : *
Abbreviations and acronyms	: PBT: persistent, bioaccumulative and toxic. vPvB: very persistent and very bioaccumulative
Sources of key data used	: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
List of relevant R phrases (heading 3)	: R11 : Highly flammable. R38 : Irritating to skin. R48/20 : Harmful : danger of serious damage to health by prolonged exposure through inhalation. R51/53 : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R62 : Possible risk of impaired fertility. R65 : Harmful : may cause lung damage if swallowed. R67 : Vapours may cause drowsiness and dizziness.
List of full text of H-statements in section 3	: H225 : Highly flammable liquid and vapour. H304 : May be fatal if swallowed and enters airways. H315 : Causes skin irritation. H336 : May cause drowsiness or dizziness.

**MATERIAL SAFETY DATA SHEET (MSDS)**

**PETROLEUM ETHER 60 - 80° C AR (PETROLEUM SPIRIT)**

In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008

**DISCLAIMER:**

- **SUVCHEM** Products are to be used as Lab Chemicals for R&D only. Not for drug, medicinal, household or other uses.
- **SUVCHEM** shall not be responsible for any damage resulting from handling or from contact with the above product.
- **SUVCHEM** provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product.

**End of document**