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

Trade name: Illuminating Paraffin

Synonyms: Illuminating Paraffin, Lamp Oil, Illuminating Kerosine

Company: Sasol Oil
32 Hill Street
Randburg, 2125
South Africa

Information (Product safety)

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South Africa +27 (0)17 610 4444
Australia +61 2 9032 0460

2. Hazards identification

Identification of the risks

R45 May cause cancer.
R65 Also harmful: may cause lung damage if swallowed.
R10 Flammable.
R38 Irritating to skin.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R63 Possible risk of harm to the unborn child.
R67 Vapours may cause drowsiness and dizziness.

Particular risks to human beings and the environment

Very toxic to aquatic organisms.

3. Composition/information on ingredients

Preparation on the base:

Naphtha (petroleum), hydrosulfurized heavy; Low boiling point hydrogen treated naphtha

Contents: >= 60.00 %W/W

CAS-No. 64742-82-1  Index-No. 649-330-00-2  EC-No. 265-185-4
Safety Data Sheet

Illuminating Paraffin

Symbol(s)  T  
R-phrase(s)  -R45 -R46 -R65

Kerosine (petroleum); Straight run kerosine
Contents: <= 20.00 %W/W
CAS-No.  8008-20-6  
Symbol(s)  Xn  
R-phrase(s)  -R65

heptane; n-heptane
Contents: >= 5.00 - <= 10.00 %W/W
CAS-No.  142-82-5  
Symbol(s)  F, Xn, N  
R-phrase(s)  -R11 -R38 -R50/53 -R65 -R67

octane; n-octane
Contents: <= 10.00 %W/W
CAS-No.  111-65-9  
Symbol(s)  F, Xn, N  
R-phrase(s)  -R11 -R38 -R50/53 -R65 -R67

methylcyclohexane
Contents: >= 5.00 - <= 10.00 %W/W
CAS-No.  108-87-2  
Symbol(s)  F, Xn, N  
R-phrase(s)  -R11 -R38 -R65 -R67 -R51/53

cyclohexane
Contents: >= 1.00 - <= 5.00 %W/W
CAS-No.  110-82-7  
Symbol(s)  F, Xn, N  
R-phrase(s)  -R11 -R38 -R65 -R67 -R50/53

toluene
Contents: >= 1.00 - <= 5.00 %W/W
CAS-No.  108-88-3  
Symbol(s)  F, Xn  
R-phrase(s)  -R11 -R38 -R48/20 -R63 -R65 -R67

taxylene
Contents: >= 1.00 - <= 5.00 %W/W
CAS-No.  1330-20-7  
Index-No.  601-022-00-9  
EC-No.  215-535-7
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Symbol(s) Xn  R-phrase(s) -R10 -R20/21 -R38

For the full text of the R-phrases mentioned in this Section, see Section 16.

4. First aid measures

General advice  Immediate medical attention is required.

Inhalation  Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. Call a physician immediately.

Skin contact  Wash off immediately with plenty of water for at least 15 minutes. Call a physician immediately.

Eye contact  Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Call a physician immediately.

Ingestion  If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

5. Fire-fighting measures

Suitable extinguishing media  Water spray, Dry powder, Foam

Specific hazards during fire fighting  Flash back possible over considerable distance.

Special protective equipment for fire-fighters  Wear self-contained breathing apparatus and protective suit.

Further information  Cool containers / tanks with water spray.

6. Accidental release measures

Personal precautions  Keep people away from and upwind of spill/leak. Remove all sources of ignition. Do not breathe vapours or spray mist.

Environmental precautions  Should not be released into the environment. Prevent further leakage or spillage if safe to do so.

Methods for cleaning up  Soak up with inert absorbent material and dispose of as hazardous waste.

7. Handling and storage

Handling
Safe handling advice
Provide sufficient air exchange and/or exhaust in work rooms. Wear personal protective equipment.

Advice on protection against fire and explosion
Keep away from heat and sources of ignition. Use explosion-proof equipment.

Storage
Requirements for storage areas and containers
Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure controls/personal protection

Components with workplace control parameters

NATIONAL OCCUPATIONAL EXPOSURE LIMITS

EUROPEAN OCCUPATIONAL EXPOSURE LIMITS

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Control parameters</th>
<th>Update</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-HEPTANE</td>
<td>TWA</td>
<td>2,085 mg/m³ 500 ppm</td>
<td>12 2009</td>
<td>EU Exposure Limit Values</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td></td>
<td>12 2009</td>
<td>EU Exposure Limit Values</td>
</tr>
<tr>
<td>XYLENE, MIXED ISOMERS, PURE</td>
<td>TWA</td>
<td>221 mg/m³ 50 ppm</td>
<td>12 2009</td>
<td>EU Exposure Limit Values</td>
</tr>
<tr>
<td></td>
<td>STEL</td>
<td>442 mg/m³ 100 ppm</td>
<td>12 2009</td>
<td>EU Exposure Limit Values</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td></td>
<td>12 2009</td>
<td>EU Exposure Limit Values</td>
</tr>
<tr>
<td></td>
<td>STEL</td>
<td></td>
<td>12 2009</td>
<td>EU Exposure Limit Values</td>
</tr>
</tbody>
</table>

Engineering measures
Provide sufficient air exchange and/or exhaust in work rooms.

Personal protective equipment

Respiratory protection
In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection
Gloves suitable for permanent contact:
- Material: butyl-rubber
- Break through time: 4 h
- Material thickness: 0.5 mm

unsuitable gloves
- Material: Polyvinylchloride, leather, nitrile rubber/nitrile latex, natural rubber/natural latex

Eye protection
Safety glasses with side-shields
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Skin and body protection
Protective suit, Safety shoes

Hygiene measures
Wash hands before breaks and immediately after handling the product.

Protective measures
Wear suitable protective equipment.

9. Physical and chemical properties

Form  liquid
state of matter  liquid; at 20 °C; 1,013 hPa
Colour  Clear to light yellowish brown
Odour  Hydrocarbon-like petroleum
Pour point  0 °C
Boiling point/boiling range  160 °C
Flash point  45 °C
Density  0.77 g/cm³; 20 °C
Water solubility  Insoluble
Viscosity, kinematic  3 mm²/s; 50 °C

10. Stability and reactivity

Materials to avoid  Oxidizing agents, Reducing agents

11. Toxicological information

Acute oral toxicity  Naphtha (petroleum), hydrodesulfurized heavy; Low boiling point hydrogen treated naphtha:
LD50 rat: > 5,000 mg/kg; (literature value)
Kerosine (petroleum); Straight run kerosine:
LD50 rat: > 5,000 mg/kg; (literature value)
toluene:
LD50 rat: 5,000 mg/kg; literature value

Acute inhalation toxicity  Naphtha (petroleum), hydrodesulfurized heavy; Low boiling point hydrogen treated naphtha:
LC50 rat: > 12 mg/l; 6 h(literature value)
Kerosine (petroleum); Straight run kerosine:
LC50 rat: > 5 mg/l; 4 h(literature value)
toluene:
LC50 mouse: 5,320 mg/l; literature value
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Acute dermal toxicity
Naphtha (petroleum), hydrosulfurized heavy; Low boiling point hydrogen treated naphtha:
LD50 rabbit:  > 2,000 mg/kg; (literature value)
Kerosine (petroleum); Straight run kerosine:
LD50 rabbit:  > 2,000 mg/kg; (literature value)
toluene:
LD50 rat:  12,124 mg/kg; literature value

Skin irritation
toluene:
rabbit: moderately irritating; (literature value)

Eye irritation
Kerosine (petroleum); Straight run kerosine:
rabbit: not irritating; Draize Test; (literature value)
toluene:
rabbit: Mild eye irritation; (literature value)

Sensitisation
Kerosine (petroleum); Straight run kerosine:
Buehler Test guinea pig: Did not cause sensitization on laboratory animals.

12. Ecological information
Ecotoxicity effects
Toxicity to fish
toluene:
LC50 Pimephales promelas: 34.27 mg/l; 96 h; literature value
toluene:
LC50 Poecilia reticulata: 59.3 mg/l; 96 h; literature value
toluene:
LC50 Cyprinodon variegatus: 277 mg/l; 96 h; literature value

Toxicity to daphnia and other aquatic invertebrates.
toluene:
LC50 Daphnia magna: 313 mg/l; 48 h; literature value

13. Disposal considerations
Product
Dispose of as special waste in compliance with local and national regulations.

Contaminated packaging
Contaminated packaging should be emptied optimally and after being suitably cleaned returned for re-use. Store containers and offer for recycling of material when in accordance with the local regulations.

14. Transport information
ADR
UN-Number: 1223; Class: 3; Packaging group: III; F1;
Description of the goods: KEROSENE
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**RID**  
UN-Number: 1223; Class: 3; Packaging group: III; F1;  
Description of the goods: KEROSENE

**ADNR**  
UN-Number: 1223; Class: 3; Packaging group: III; F1;  
Description of the goods: KEROSENE

**IMDG**  
UN-Number: 1223; Class: 3; EmS: F-E, S-E; Packaging group: III; Description of the goods: KEROSENE

**ICAO/IATA**  
UN-Number: 1223; Class: 3; Packaging group: III; Description of the goods: Kerosene

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**15. Regulatory information**

**Labelling**

Regulatory base  
1999/45/EC

Symbol(s)  
T: Toxic  
N: Dangerous for the environment

R-phrase(s)  
R45: May cause cancer.  
R65: Also harmful: may cause lung damage if swallowed.  
R10: Flammable.  
R38: Irritating to skin.  
R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R63: Possible risk of harm to the unborn child.  
R67: Vapours may cause drowsiness and dizziness.

S-phrase(s)  
S53: Avoid exposure - obtain special instructions before use.  
S35: This material and its container must be disposed of in a safe way.  
S36/37: Wear suitable protective clothing and gloves.  
S43: In case of fire, use sand, dry chemical or alcohol-resistant foam.  
S61: Avoid release to the environment. Refer to special instructions/ Safety data sheets.
Safety Data Sheet

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S62: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Special labelling of certain mixtures

Restricted to professional users.

Hazardous components which must be listed on the label

Naphtha (petroleum), hydrodesulfurized heavy; Low boiling point hydrogen treated naphtha
toluene

16. Other information

Full text of R-phrases referred to under sections 2 and 3

R10       Flammable.
R11       Highly flammable.
R20/21    Harmful by inhalation and in contact with skin.
R38       Irritating to skin.
R45       May cause cancer.
R46       May cause heritable genetic damage.
R48/20    Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R50/53    Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53    Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R63       Possible risk of harm to the unborn child.
R65       Harmful: may cause lung damage if swallowed.
R67       Vapours may cause drowsiness and dizziness.

All reasonable efforts were exercised to compile this SDS in accordance with ISO 11014 and ANSIZ400.1.1993. The MSDS provides information regarding the health, safety and environmental hazards, at the date of issue, to facilitate the safe receipt, use and handling of the product in the workplace. Since Sasol and its subsidiaries cannot anticipate or control all conditions under which the product may be handled, used and received in the workplace, it remains the obligation of each user, receiver or handler to, prior to usage, review this SDS in the context within which the product will be received, handled or used in the workplace. The user, handler or receiver must ensure that the necessary mitigating measures are in place as regards health and safety. This does not substitute the need or requirement for any relevant risk assessments to be conducted. It further remains the responsibility of the receiver, handler or user to communicate such information to all relevant parties that may be involved in the receipt, use or handling of the product.

Although all reasonable efforts were exercised in the compilation of this SDS, Sasol does not expressly warrant the accuracy or assume any liability for the incompleteness of the information contained herein or any advice given. The product is sold and risk passes in accordance with the specific terms and conditions of sale.

The MSDS was created by: MOTLATSI
The MSDS was approved by: S. Shabalala