

Safety Data Sheet

KEROSENE

Version 1.3

Revision Date: 11/13/2023

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : KEROSENE

Recommended use of the chemical and restrictions on use

Recommended use : Industrial Chemical

Restrictions on use : None known.

Manufacturer or supplier's details

Company : Univar Solutions USA
Address : 3075 Highland Pkwy Suite 200
 Downers Grove, IL 60515
 United States of America (USA)

Emergency telephone number:

Transport North America: CHEMTREC (1-800-424-9300)

CHEMTREC INTERNATIONAL Tel # 703-527-3887

Additional Information: : Responsible Party: Product Compliance Department
 E-mail: SDSNA@univarsolutions.com
 SDS Requests: 1-855-429-2661
 Website: www.univarsolutions.com

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids : Category 3

Skin irritation : Category 2

Specific target organ toxicity
 - single exposure : Category 3 (Central nervous system)

Aspiration hazard : Category 1

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H226 Flammable liquid and vapour.
 H304 May be fatal if swallowed and enters airways.
 H315 Causes skin irritation.
 H336 May cause drowsiness or dizziness.

Precautionary statements : **Prevention:**
 P210 Keep away from heat/ sparks/ open flames/ hot surfaces.
 No smoking.
 P233 Keep container tightly closed.
 P240 Ground/bond container and receiving equipment.
 P241 Use explosion-proof electrical/ ventilating/ lighting equip-
 ment.

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P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/ eye protection/ face protection.
Response:
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
P331 Do NOT induce vomiting.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reuse.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
Storage:
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance

Hazardous components

| CAS-No. | Chemical name | Weight percent |
|--|--|----------------|
| 64742-47-8 / 64742-81-0 / 8008-20-6 | Distillates (pet), hydrotreated light AND/OR Kerosine (petroleum), hydrodesulfurized AND/OR Kerosine (petroleum) | 90 - 100 |
| 91-20-3 | **Naphthalene | 1 - 5 |

Actual concentration is withheld as a trade secret

Any Concentration shown as a range is due to batch variation.

Special Notes: : ** Other substances in the product which may present a health or environmental hazard.

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Symptoms of poisoning may appear several hours later.

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|-------------------------|---|
| If inhaled | <p>Do not leave the victim unattended.</p> <p>: Consult a physician after significant exposure.</p> <p>If unconscious, place in recovery position and seek medical advice.</p> |
| In case of skin contact | <p>: If skin irritation persists, call a physician.</p> <p>If on skin, rinse well with water.</p> <p>If on clothes, remove clothes.</p> |
| In case of eye contact | <p>: Immediately flush eye(s) with plenty of water.</p> <p>Remove contact lenses.</p> <p>Protect unharmed eye.</p> <p>Keep eye wide open while rinsing.</p> <p>If eye irritation persists, consult a specialist.</p> |
| If swallowed | <p>: Keep respiratory tract clear.</p> <p>Do NOT induce vomiting.</p> <p>Do not give milk or alcoholic beverages.</p> <p>Never give anything by mouth to an unconscious person.</p> <p>If symptoms persist, call a physician.</p> <p>Take victim immediately to hospital.</p> |

SECTION 5. FIREFIGHTING MEASURES

| | |
|---|--|
| Suitable extinguishing media | <p>: Alcohol-resistant foam</p> <p>Carbon dioxide (CO₂)</p> <p>Dry chemical</p> |
| Unsuitable extinguishing media | <p>: High volume water jet</p> |
| Specific hazards during fire-fighting | <p>: Do not allow run-off from fire fighting to enter drains or water courses.</p> |
| Hazardous combustion products | <p>: Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).</p> <p>Hazardous decomposition products due to incomplete combustion</p> <p>Nitrogen oxides (NO_x)</p> <p>sulfur oxides</p> |
| Specific extinguishing methods | <p>: Use a water spray to cool fully closed containers.</p> |
| Further information | <p>: Collect contaminated fire extinguishing water separately. This must not be discharged into drains.</p> <p>Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.</p> <p>For safety reasons in case of fire, cans should be stored separately in closed containments.</p> |
| Special protective equipment for firefighters | <p>: Wear self-contained breathing apparatus for firefighting if necessary.</p> |

SECTION 6. ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
| Personal precautions, protective equipment and emergency procedures | <p>: Use personal protective equipment.</p> <p>Ensure adequate ventilation.</p> <p>Remove all sources of ignition.</p> <p>Evacuate personnel to safe areas.</p> |
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- Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
- Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

SECTION 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : Do not spray on a naked flame or any incandescent material.
Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Keep away from open flames, hot surfaces and sources of ignition.
- Advice on safe handling : Avoid formation of aerosol.
Do not breathe vapours/dust.
Avoid exposure - obtain special instructions before use.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Take precautionary measures against static discharges.
Provide sufficient air exchange and/or exhaust in work rooms.
Open drum carefully as content may be under pressure.
Dispose of rinse water in accordance with local and national regulations.
- Conditions for safe storage : No smoking.
Keep container tightly closed in a dry and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

| CAS-No. | Components | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis |
|---|--|----------------------------------|--|-----------|
| 64742-47-8 / 64742-81-0 / 8008-20-6 | Distillates (pet), hydrotreated light AND/OR Kerosine (petroleum), hydrodesulfurized AND/OR Kerosine (petroleum) | TWA | 100 mg/m ³ | NIOSH REL |
| 91-20-3 | **Naphthalene | TWA | 10 ppm | ACGIH |

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| | | | | |
|--|--|------|----------------------------------|-----------|
| | | TWA | 10 ppm 50 mg/m ³ | NIOSH REL |
| | | ST | 15 ppm 75 mg/m ³ | NIOSH REL |
| | | TWA | 10 ppm 50 mg/m ³ | OSHA Z-1 |
| | | TWA | 10 ppm 50 mg/m ³ | OSHA P0 |
| | | STEL | 15 ppm 75 mg/m ³ | OSHA P0 |
| | | PEL | 0.1 ppm 0.5 mg/m ³ | CAL PEL |

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.
In the case of vapour formation use a respirator with an approved filter.

Hand protection

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : clear, light yellow, light green

Odour : Kerosene-like odor

Odour Threshold : No data available

pH : No data available

Freezing Point (Melting point/freezing point) : < -40 °C (< -40 °F)

Boiling Point (Boiling point/boiling range) : 149 - 300 °C (300 - 572 °F)

Flash point : 38 °C (100 °F)
Method: Tag closed cup

Evaporation rate : < 1
(Butyl Acetate = 1)

Flammability (solid, gas) : No data available

Upper explosion limit : 7.0 %(V)

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|--|---|
| Lower explosion limit | : 0.7 %(V) |
| Vapour pressure | : 0.4 mmHg |
| Relative vapour density | : > 4.5(Air = 1.0) |
| Relative density | : 0.775 - 0.840 @ 20 °C (68 °F) |
| Density | : 0.8069 g/cm ³ @ 20 °C (68 °F) |
| Solubility(ies) | |
| Water solubility | : insoluble |
| Solubility in other solvents | : No data available |
| Partition coefficient: n-octanol/water | : No data available |
| Auto-ignition temperature | : 210 °C |
| Thermal decomposition | : No data available |
| Viscosity | |
| Viscosity, kinematic | : 1 - 2.4 mm ² /s @ 40 °C (104 °F) |

SECTION 10. STABILITY AND REACTIVITY

| | |
|------------------------------------|--|
| Reactivity | : Stable under recommended storage conditions. |
| Chemical stability | : Stable under normal conditions. |
| Possibility of hazardous reactions | : No hazards to be specially mentioned. |
| Conditions to avoid | : Keep away from heat, flame, sparks and other ignition sources. |
| Incompatible materials | : Strong oxidizing agents Strong reducing agents |

SECTION 11. TOXICOLOGICAL INFORMATION**Skin corrosion/irritation****Components:****64742-47-8 / 64742-81-0 / 8008-20-6:**

Species: Rabbit

Exposure time: 24 h

Result: Irritating to skin.

Serious eye damage/eye irritation**Components:****64742-47-8 / 64742-81-0 / 8008-20-6:**

Species: Rabbit

Result: Irritating to eyes.

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Carcinogenicity**IARC**

Group 2B: Possibly carcinogenic to humans

91-20-3

**Naphthalene

OSHA

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP

Reasonably anticipated to be a human carcinogen

91-20-3

**Naphthalene

STOT - single exposure**Components:****64742-47-8 / 64742-81-0 / 8008-20-6:**

Exposure routes: Inhalation

Target Organs: Central nervous system

Assessment: May cause drowsiness or dizziness., The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.

Aspiration toxicity**Components:****64742-47-8 / 64742-81-0 / 8008-20-6:**

May be fatal if swallowed and enters airways.

Further information**Product:**

Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Concentrations substantially above the TLV value may cause narcotic effects.

Solvents may degrease the skin.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Components:****64742-47-8 / 64742-81-0 / 8008-20-6:**Toxicity to fish : LL50 (Oncorhynchus mykiss (rainbow trout)): 25 mg/l
Exposure time: 96 h
Test Type: static testToxicity to daphnia and other : EL50 (Daphnia magna (Water flea)): 1.4 mg/l
aquatic invertebrates : Exposure time: 48 h
Test Type: static testToxicity to algae : EL50 (Pseudokirchneriella subcapitata (green algae)): 1 mg/l
End point: Growth rate

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Exposure time: 72 h
Test Type: static test

Acute aquatic toxicity- Assessment : Toxic to aquatic life.
Chronic aquatic toxicity- Assessment : Toxic to aquatic life with long lasting effects.

Persistence and degradability**Components:****64742-47-8 / 64742-81-0 / 8008-20-6:**

Biodegradability : aerobic
Inoculum: activated sludge
Biodegradation: 61 %
Exposure time: 28 d
Remarks: Readily biodegradable

Bioaccumulative potential**Components:****91-20-3:**

Partition coefficient: n-octanol/water : log Pow: 3.4 (25 °C)
pH: 7 - 7.5

Mobility in soil

No data available

Other adverse effects**Product:**

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Toxic to aquatic life with long lasting effects.

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues : Dispose of in accordance with all applicable local, state and federal regulations.
For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Univar Solutions ChemCare: 1-800-637-7922

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Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.
Do not burn, or use a cutting torch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION

DOT (Department of Transportation):

UN1223, Kerosene, 3, III

IATA (International Air Transport Association):

UN1223, Kerosene, 3, III

IMDG (International Maritime Dangerous Goods):

UN1223, KEROSENE, 3, III, Marine Pollutant (MIXTURE OF PETROLEUM DISTILLATES) , Flash Point:38 °C(100 °F)

Special Notes: : The flash point for this material is greater than 100 F (38 C).
Therefore, in accordance with 49 CFR 173.150(f) non-bulk containers (<450L or <119 gallon capacity) of this material may be shipped as non-regulated when transported solely by land, as long as the material is not a hazardous waste, a marine pollutant, or specifically listed as a hazardous substance.

SECTION 15. REGULATORY INFORMATION

WHMIS Classification : B3: Combustible Liquid
D2B: Toxic Material Causing Other Toxic Effects

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

| Components | CAS-No. | Component RQ (lbs) | Calculated product RQ (lbs) |
|---------------|---------|--------------------|-----------------------------|
| **Naphthalene | 91-20-3 | 100 | 3333 |
| **Benzene | 71-43-2 | 10 | * |

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)
Skin corrosion or irritation
Specific target organ toxicity (single or repeated exposure)
Aspiration hazard

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : The following components are subject to reporting levels established by SARA Title III, Section 313:

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91-20-3

**Naphthalene

Clean Air Act

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 112 (40 CFR 61):

91-20-3 **Naphthalene

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

91-20-3 **Naphthalene

108-88-3 **Toluene

71-43-2 **Benzene

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

91-20-3 **Naphthalene

108-88-3 **Toluene

71-43-2 **Benzene

This product contains the following toxic pollutants listed under the U.S. Clean Water Act Section 307

91-20-3 **Naphthalene

Massachusetts Right To Know

| | |
|--------------|--|
| 64742-47-8 / | Distillates (pet), hydrotreated light AND/OR |
| 64742-81-0 / | Kerosine (petroleum), hydrodesulfurized |
| 8008-20-6 | AND/OR Kerosine (petroleum) |
| 91-20-3 | **Naphthalene |
| 71-43-2 | **Benzene |

Pennsylvania Right To Know

| | |
|--------------|--|
| 64742-47-8 / | Distillates (pet), hydrotreated light AND/OR |
| 64742-81-0 / | Kerosine (petroleum), hydrodesulfurized |
| 8008-20-6 | AND/OR Kerosine (petroleum) |
| 91-20-3 | **Naphthalene |
| 108-88-3 | **Toluene |
| 71-43-2 | **Benzene |

California Prop 65

⚠ WARNING: This product can expose you to chemicals including **Naphthalene, **Benzene, which is/are known to the State of California to cause cancer, and **Toluene, **Benzene, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

The components of this product are reported in the following inventories:

| | |
|-------|---|
| TSCA | : On the inventory, or in compliance with the inventory |
| AICS | : not determined |
| DSL | : On the inventory, or in compliance with the inventory |
| NZIoC | : not determined |
| ENCS | : not determined |

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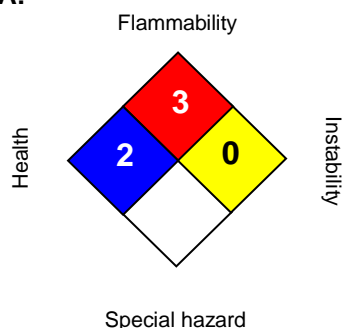
KECI : not determined

PICCS : not determined

IECSC : not determined

SECTION 16. OTHER INFORMATION

NFPA:



HMIS III:

| | |
|-----------------|---|
| HEALTH | 2 |
| FLAMMABILITY | 2 |
| PHYSICAL HAZARD | 0 |

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

The information accumulated is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made become available subsequently to the date hereof, we do not assume any responsibility for the results of its use. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Univar Solutions Product Compliance Department (1-855-429-2661) SDSNA@univarsolutions.com.

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Material number:

16197507, 16203739, 16187911, 16174763, 16177873, 16170236, 16154776, 16156581, 16156294, 16154994, 16154927, 16152762, 16155039, 16140758

| Key or legend to abbreviations and acronyms used in the safety data sheet | | | |
|---|---|-------|---|
| ACGIH | American Conference of Government Industrial Hygienists | LD50 | Lethal Dose 50% |
| AICS | Australia, Inventory of Chemical Substances | LOAEL | Lowest Observed Adverse Effect Level |
| DSL | Canada, Domestic Substances List | NFPA | National Fire Protection Agency |
| NDSL | Canada, Non-Domestic Substances List | NIOSH | National Institute for Occupational Safety & Health |
| CNS | Central Nervous System | NTP | National Toxicology Program |
| CAS | Chemical Abstract Service | NZIoC | New Zealand Inventory of Chemicals |

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| EC50 | Effective Concentration | NOAEL | No Observable Adverse Effect Level |
| EC50 | Effective Concentration 50% | NOEC | No Observed Effect Concentration |
| EGEST | EOSCA Generic Exposure Scenario Tool | OSHA | Occupational Safety & Health Administration |
| EOSCA | European Oilfield Specialty Chemicals Association | PEL | Permissible Exposure Limit |
| EINECS | European Inventory of Existing Chemical Substances | PICCS | Philippines Inventory of Commercial Chemical Substances |
| MAK | Germany Maximum Concentration Values | PRNT | Presumed Not Toxic |
| GHS | Globally Harmonized System | RCRA | Resource Conservation Recovery Act |
| >= | Greater Than or Equal To | STEL | Short-term Exposure Limit |
| IC50 | Inhibition Concentration 50% | SARA | Superfund Amendments and Reauthorization Act. |
| IARC | International Agency for Research on Cancer | TLV | Threshold Limit Value |
| IECSC | Inventory of Existing Chemical Substances in China | TWA | Time Weighted Average |
| ENCS | Japan, Inventory of Existing and New Chemical Substances | TSCA | Toxic Substance Control Act |
| KECI | Korea, Existing Chemical Inventory | UVCB | Unknown or Variable Composition, Complex Reaction Products, and Biological Materials |
| <= | Less Than or Equal To | WHMIS | Workplace Hazardous Materials Information System |
| LC50 | Lethal Concentration 50% | | |