SDS Version No: 3

# Safety Data Sheet Kerosene

Classified as: Hazardous according to the EPA Hazardous Substances (Hazard Classifications) Notice 2020.

# Section 1: SUBSTANCE AND SUPPLIER DETAILS

Product Name: Kerosene

Other Names: Commercial Kerosine, Solvent 14

**Supplier:** Z Energy Limited

3 Queens Wharf

Wellington

New Zealand

**Phone:** +64 4 472 0080

**Local Contact:** Phone – 0800 474 355

Email – general@z.co.nz

Recommended Use: Industrial solvent.

**Use Restriction:** Commercial or domestic fuel.

In Case of Emergency Contact:

CHEMCALL: 0800 CHEMCALL (243 622) 24 hours

International - +64 4 917 9888

# **Section 2: HAZARDS IDENTIFICATION**

This product is classified as a Dangerous Good for Transport.

This product is classified as hazardous according to criteria in the EPA Hazardous Substances (Hazard Classifications) Notice 2020.

HSNO APPROVAL NUMBER: HSR001049

HSNO CLASSIFICATIONS: 3.1C - Flammable liquid

6.1E - Aspiration hazard

9.1B - Ecotoxic in the aquatic environment, chronic

GHS Classification: Flammable liquid – Category 3

Aspiration hazard - Category 1

Hazardous to the aquatic environment, chronic - Category 2

#### **Labelling Elements:**

Hazard Statements:

H226 Flammable liquid and vapour.

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H304 May be fatal if swallowed and enters airways.

H411 Toxic to aquatic life with long lasting effects.

#### **GHS Pictograms:**







# Signal Word: DANGER

#### PREVENTION STATEMENTS:

P102 - Keep out of reach of children.

P103 – Read carefully and follow all instructions.

P210 - Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.

P233 - Keep container tightly closed.

P240 – Ground and bond container and receiving equipment.

P241 – Use explosion-proof ventilating/electrical/lighting equipment.

P242 – Use non-sparking tools.

P243 – Take action to prevent static discharges.

P273 – Avoid release to the environment.

P280 – Wear protective gloves, protective clothing, eye protection, face protection.

#### RESPONSE STATEMENTS:

P101 - If medical advice is needed, have product container or label at hand.

P301 + P310 - IF SWALLOWED: Do NOT induce vomiting. Immediately call a POISON CENTRE or doctor.

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P370 + P378 - In case of fire: Use water spray, dry powder, foam, or carbon dioxide to extinguish.

P391 - Collect spillage.

#### STORAGE:

P403 + P235 - Store in a well-ventilated place. Keep cool.

P405 - Store locked up.

#### DISPOSAL:

P501 - In accordance with the EPA Hazardous Substances (Disposal) Notice 2017. Dispose of via an approved waste disposal contractor. Refer to Section 13 of the SDS.

Other information: Repeated exposure may cause skin dryness or cracking. Slightly irritating to the respiratory system.

# **Section 3: COMPOSITION / INFORMATION ON INGREDIENTS**

**Mixture**: A complex combination of hydrocarbons consisting primarily of hydrocarbons having carbon numbers predominantly in the range C9 to C16 and boiling in the range of 140°C to 300°C.

Main Component	CAS Number	Concentration (%wt)
Kerosine (petroleum)	8008-20-6	>90 %
Naphthalene	91-20-3	<3 %

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There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

#### **Section 4: FIRST AID MEASURES**

Workplace Facilities

Required:

Eye wash and safety shower facilities should be provided in workplaces where there is a

risk of significant exposure.

If Inhaled: Remove to fresh air and keep at rest. Seek medical attention if symptoms persist.

In Contact with Eye: Hold eyes open, flush continuously with water for at least 15 minutes. Seek medical

attention if irritation develops and persists.

In Contact with Skin: Wash skin with soap and plenty of water, while removing contaminated clothing and

shoes. Wash contaminated clothing before re-use. Seek medical attention if skin

irritation develops and persists.

If Swallowed: DO NOT INDUCE VOMITING. Rinse mouth. Never give anything by mouth to an

unconscious person. If unconscious, seek immediate medical attention. If vomiting

occurs, keep head below hips to prevent aspiration to lungs.

Advice to Doctor: Treat symptomatically. Aspiration of product into lungs following vomiting may cause

fatal pulmonary oedema.

# **Section 5: FIRE FIGHTING MEASURES**

Fire/Explosion Hazard: Flammable liquid and vapour. Liquid can ignite leading to a flash fire, or an

explosion in a confined space. May ignite on surfaces at temperatures above autoignition temperature. Keep away from hot surfaces, heat, sparks, and ignition

sources.

Hazchem Code: 3Y.

Suitable Extinguishing

Media:

Use water spray or fog, carbon dioxide, dry powder, or foam. Sand or earth may be

used on small fires. Do not use water jet.

**Precautions in Connection** 

with Fire:

The vapour is heavier than air, spreads along the ground and distant ignition is possible. Will float and may be reignited on surface water. Flammable vapours may be present even at temperatures below the flash point. Combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates and gases, including carbon monoxide and unidentified organic and inorganic compounds.

Advice for firefighters:

Fire fighters should wear Self-Contained Breathing Apparatus (SCBA) operated in positive pressure mode and full protective clothing to prevent exposure to vapours or fumes. Water spray may be used to cool down heat-exposed containers. Fight fire from safe location. This product should be prevented from entering drains and watercourses.

Keep adjacent containers cool by spraying with water from a safe location. If possible, remove them from the danger zone. If adequate cooling cannot be achieved, the area needs to be evacuated, and further firefighting and cooling attempts should be carried out from a safe location.

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# Section 6: ACCIDENTAL RELEASE MEASURES

An emergency response plan meeting the requirements of Part 5 of the Health and Safety at Work (Hazardous Substances) Regulations 2017 is required when held in quantities greater than 1.000L.

Clear area of all unprotected personnel. Keep unnecessary and unprotected Precautions:

> personnel from entering area. Do not breathe fumes/vapour. Avoid contact with skin and eyes. Remove any readily combustible materials and all sources of ignition. Ventilate area. Do not release to the environment. If spill enters

waterways, contact local council pollution hotline.

Suitable Protective Equipment:

Emergency responders must use personal protective equipment, including gloves, PVC jacket and trousers, knee length, chemical resistant safety boots, and safety glasses with side shields or safety goggles. Respiratory protection may be required if large amounts of vapour/fumes is present. Contaminated clothing may be a fire hazard and therefore should be soaked with water before being removed.

Stop leak if safe to do so. Contain and absorb spill using inert, non-combustible, Spill or Leak Procedures.

absorbent material such as sand, earth. Collect using clean, non-sparking tools and place in a waste container for disposal. Ensure waste container is properly labelled. Allow residues to evaporate or soak up with appropriate absorbent

material. Do not wash residues away with water.

Dispose of as per Section 13. **Waste Disposal Methods:** 

Ensure there is appropriate and adequate personal protective equipment, trained **Emergency preparation:** 

personnel and clean up materials for management of accidental release.

# Section 7: HANDLING AND STORAGE

Precautions for Safe Handling:

Avoid naked flames, hot surfaces, heat, and ignition sources. The vapour is heavier than air, spreads along the ground and distant ignition is possible. Avoid contact with skin and eyes. Do not breathe vapour/fumes. Use local exhaust ventilation if there is risk of inhalation of vapours, mists, or aerosols. Do not eat, drink, or smoke when using this product. Only use in well-ventilated areas. Take precautionary measures against static discharges. Ensure all equipment is properly bonded. Cloth, paper, and other materials that are used to absorb spills present a fire hazard. Avoid their accumulation by disposing of them safely and immediately. Remove contaminated clothing and wash hands and face before

entering eating areas.

**Product Transfer:** Electrostatic charges may be generated during pumping. Electrostatic discharge

may cause fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (<= 1 m/sec until fill pipe submerged to twice its diameter, then <= 7 m/sec). Avoid splash filling. Do NOT use compressed air for filling, discharging, or handling operations. If positive displacement pumps are used,

these must be fitted with a non-integral pressure relief valve.

Partly filled containers present a greater hazard than those that are full, therefore

handling, transfer and sampling activities need special care.

Keep out of reach of children. Store locked up. Keep container tightly closed in a Storage:

dry, well-ventilated place away from direct sunlight and other sources of heat or

ignition.

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Keep in a bunded area with a sealed (low permeability) floor, to provide

containment against spillage.

Site Storage Requirements: Site Signage will be required when quantities exceed 1,000L. For

incompatibilities refer to Section 10.

#### Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Workplace Exposure Standards NZ: Workplace Exposure Standards have not been established for this product but

have been established for the following ingredient:

Naphthalene (carc.): TWA 0.5 ppm, 2.6 mg/m<sup>3</sup>, STEL 2 ppm, 10 mg/m<sup>3</sup>

Engineering Controls: Eyewash facilities and safety showers should be provided in the work area where

there is a risk of exposure to eyes and skin. If use generates large quantities of vapour/fumes, use engineering controls such as local exhaust ventilation to ensure workers are not exposed to levels exceeding the exposure standards.

Personal Protective Equipment: Avoid contact with skin and eyes. Avoid breathing vapour/fumes.

Hand protection: Wear protective gloves that are resistant to the product, e.g., neoprene rubber,

nitrile. Refer to Australian and New Zealand Standard AS/NZS 2161 for

protective gloves.

Skin and body protection: Wear protective clothing such as cotton overalls buttoned and neck and wrist.

When handling large quantities, a chemical resistant apron is recommended. Refer to Australian and New Zealand Standard AS/NZS 4501 for occupational

protective clothing.

Eye protection: Use safety glasses with side shields or safety goggles to protect eyes. A face

shield may also be used with safety glasses to prevent splashes to face. Refer to

AS/NZS 1336 and 1337 for suitable eye and face protection.

Respiratory protection: Where there is inadequate ventilation and use results in exposure to

vapour/fumes, use a respirator with a replaceable organic vapour filter. Refer to

AS/NZS 1715 and AS/NZS 1716 for suitable respiratory protection.

Other information: PPE selected must be impervious to the substance. Do not eat, smoke, or drink

where material is handled, processed, or stored. Wash hands carefully before eating, drinking, or smoking. Handle in accordance with safe industrial hygiene

practices.

# Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Description:LiquidColour:Pale, light colourOdour:HydrocarbonOdour Threshold:Not availablepH (20°C):Not applicableSolubility (water, 20°C):0.05 g/L

Negligible

Freezing/Melting point: Not available Boiling Point & Range: 158°C – 201°C Flammability: Flammable liquid and vapour Flash Point: 43°C

LEL/UEL:1-6% v/vVapour Pressure (20°C):0.2 kPaDecomposition Temp:Not availableAutoignition Temp:240°CRelative Density:0.79 (water = 1)Vapour Density:4.8 (air = 1)

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Partition Coefficient: n-

octanol/water

Not available

Not available

Particle Characteristics:

Not applicable

#### Section 10: STABILITY AND REACTIVITY

Viscosity (kinematic):

Stability: Stable under normal cool, dry storage conditions.

Reactivity: Not reactive under normal conditions of storage and use.

Conditions to Avoid: Heat, hot surfaces, ignition sources, sparks, flames.

**Incompatibility:** Keep away from oxidising agents and combustible materials such as paper,

cardboard, wood.

Hazardous Decomposition: Thermal decomposition may release toxic fumes containing oxides of carbon.

# Section 11: TOXICOLOGICAL INFORMATION

# **Acute Exposure**

Acute Toxicity: Not classified as acutely toxic.

LD<sub>50</sub> oral > 2,000 mg/kg. LD<sub>50</sub> dermal > 2,000 mg/kg

LC<sub>50</sub> inhalation > 20 mg/L (vapour)

Inhalation: Inhalation of vapours may cause a temporary burning sensation to the nose and

throat, coughing, and/or difficulty breathing. Large quantities of vapour will

displace oxygen and may cause drowsiness, dizziness.

Ingestion: Ingestion of large quantities may cause nausea, vomiting, stomach pain,

drowsiness, and dizziness. If vomiting occurs and is aspirated into lungs this may

be fatal.

Skin Corrosion/Irritation: Product is not classified as a skin irritant or corrosive. Prolonged or repeated skin

contact may cause defatting of the skin and dermatitis.

Serious Eye Damage/Eye

Irritation:

Product is not classified as an eye irritant or corrosive. Contact with eyes may

cause redness, stinging, weeping.

Respiratory or Skin Sensitisation: Product is not expected to be a contact or respiratory sensitiser.

# **Chronic Exposure:**

Mutagen/Carcinogen/Reproductive

Toxicant

Product is not expected to be mutagenic, carcinogenic, or a reproductive or

developmental toxicant.

**Specific Target Organ Toxicity** 

Single Exposure:

No information available. Not expected to be a specific target organ toxicant by

single exposure.

**Specific Target Organ Toxicity** 

Repeated Exposure:

No information available. Not expected to be a specific target organ toxicant by

repeated exposure.

Aspiration Hazard: Product is classified as an aspiration hazard and may cause fatal pulmonary

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oedema if aspirated into lungs.

# Section 12: ECOLOGICAL INFORMATION

**Ecotoxicity:**  $LC_{50} > 1 - \le 10 \text{ mg/L}$  in the aquatic environment.

Product is ecotoxic in the aquatic environment with long-lasting effects. Avoid

losses to the environment.

Persistence/degradability: Expected to be biodegradable. Volatile components oxidise rapidly in air by

photochemical reaction.

Bioaccumulation: Contains components with the potential to bioaccumulate.

Mobility in soil: Adsorbs to soil and has low mobility. Product floats on water.

Other adverse effects: None.

Ingredients with Ecotoxic

classifications:

Kerosene has been classified as toxic to the aquatic environment with long lasting, chronic, effects based on knowledge of the components in the product and the

ecotoxicity of similar products.

#### Section 13: DISPOSAL CONSIDERATIONS

Disposal: Recycle and reuse wherever possible. Do not dispose into the environment, in

drains or in water courses. Do not allow to drain into the ground. This will result in soil and groundwater contamination. Dispose of waste product via an approved

waste disposal contractor.

Disposal of Packaging: Labels should not be removed from containers until they have been cleaned. Do not

cut, puncture, or weld uncleaned containers. Empty containers may contain residues that may produce flammable vapours. Containers should be drained and then left to vent in a safe place away from sparks and fire. Dispose of packaging via

an approved waste disposal contractor.

# Section 14: TRANSPORT INFORMATION

This product is classified as a Dangerous Good for transport in accordance with NZS5433:2020, IMDG or IATA.





NZS5433:2020 UN No: 1223

Proper Shipping Name: Kerosene

Class: 3

Packing Group: III

Environmentally hazardous: Yes

Hazchem Code: 3Y

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IMDG:

UN No: 1223

Proper Shipping Name: Kerosene

Class: 3

Packing Group: III
Marine Pollutant: Yes

EmS: F-E, S-E

IATA:

UN No: 1223

Proper Shipping Name: Kerosene

Class: 3

Packing Group: III

Environmentally hazardous: Yes

Ensure transportation methods prevent leakage from packages and collapsing loads.

#### Section 15: REGULATORY INFORMATION

HSNO Approval Code: HSR001049

NZ Inventory of Chemicals: All ingredients are listed in the NZ Inventory of Chemicals (NZIoC).

Australian Inventory of Chemical

Substances:

All ingredients are listed on the Australian Inventory of Chemical Substances

(AICS).

This substance triggers: Compliance Certificate 500L in containers >5L, 1,500L in

containers up to 5L

Certified Handler N/A
Emergency Response Plan 1,000L
Secondary Containment 1,000L
Signage 1,000L

This product will require 2 fire extinguishers to be available where quantities of

500L or more are stored at a location.

This substance is not required to be Tracked. All workplace personnel handling this substance are required to be trained on the safe handling and PPE

requirements for the hazards associated with this substance.

#### Section 16: OTHER INFORMATION

The information provided in this Safety Data Sheet relates only to the specific material designated herein. This Safety Data Sheet summarises our best knowledge of the health and safety hazard information of the product and how to safely handle the product in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace including its use in conjunction with other products.

This substance is approved under HSNO as kerosene. All reasonable care has been taken to ensure that the information and advice contained herein are from sources believed to be reliable and to represent the most up-to-date knowledge available at the date given in Section 16. No liability is assumed for any damages related to the use or misuse of this substance.

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All chemical materials may present unknown hazards as people have varying degrees of sensitivity to chemicals. Therefore, this product should be used with caution. The information herein is given in good faith, but no warranty, express or implied is made.

SDS Issued: 14 July 2025

Supersedes: 1 September 2020

Reason for Revision: Update to GHS classifications.
Revised by: Simonne Moses - HSNO Consultant

References:

EPA NZ Approved Hazardous Substances with Controls Database. Original SDS: Z Energy Limited, Kerosene SDS, September 2020.

Summary of Abbreviations: EPA – Environmental Protection Authority

GHS – Global Harmonisation System
CAS – Chemical Abstracts Service
TWA – Time Weighted Average
STEL – Short Term Exposure Limit

**END OF SAFETY DATA SHEET** 

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