

HI OCTANE 98

Infosafe No.: LQCYX
ISSUED Date : 05/11/2025
ISSUED by: FREEDOM FUELS TERMINALLING
PTY LTD

Section 1 - Identification

Product Identifier

HI OCTANE 98

Company Name

FREEDOM FUELS TERMINALLING PTY LTD (ABN 31 097 617 082)

Address

Central Plaza 1, Level 38, 345 Queen Street Brisbane
QLD 4000 Australia

Telephone/Fax Number

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Fax: 07 3268 6477

Emergency Phone Number

Transport 0407 671 043 (9 am to 5 pm)

Terminalling 0407 671 043 (9 am to 5 pm)

EHS 0438 014 925 (9 am to 5 pm)

Retail 0459 583 370 (9 am to 5 pm)

For Ambulance, Police or Fire Services: Call Triple Zero (000)

E-mail Address

ehs@freedomfuels.com.au

Recommended use of the chemical and restrictions on use

Unleaded petrol

Other Information

Although the information and recommendations set forth in this SDS are presented in good faith and are believed to be correct as of the date of this SDS, Freedom Fuels Terminalling makes no representations as to the completeness or accuracy thereof. Information is supplied on the conditions that the persons receiving and using it will make their own determination as to the suitability for their purpose prior to use. In no event will Freedom Fuels Terminalling or any affiliate thereof be responsible for damages of any nature whatsoever resulting from the use or reliance on the information set forth in the SDS.

Section 2 - Hazard(s) Identification

GHS classification of the substance/mixture

Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Flammable liquids: Category 2

Skin corrosion/irritation: Category 2

Eye damage/irritation: Category 2A

Germ cell mutagenicity: Category 1B

Carcinogenicity: Category 1A

Specific target organ toxicity (single exposure): Category 3 (Narcotic)

Specific target organ toxicity (repeated exposure): Category 1

Aspiration hazard: Category 1

Signal Word (s)

DANGER

Hazard Statement (s)

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H340 May cause genetic defects.

H350 May cause cancer.

H336 May cause drowsiness or dizziness.

H372 Causes damage to organs through prolonged or repeated exposure.

H304 May be fatal if swallowed and enters airways.

Pictogram (s)

Flame, Exclamation mark, Health hazard

**Precautionary Statement—Prevention**

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

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 [electrical/ventilating/lighting] equipment.

P242 Use non-sparking tools.

P243 Take action to prevent static discharges.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statement—Response

P312 Call a POISON CENTER/doctor if you feel unwell.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor

P331 Do NOT induce vomiting.

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

P332+P313 If skin irritation occurs: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

P370+P378 In case of fire: Use dry chemical, carbon dioxide or foam to extinguish.

Precautionary Statement—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.

Precautionary Statement—Disposal

P501 Dispose of contents/container to an approved waste disposal plant.

Section 3 - Composition and Information on Ingredients

Ingredients

Name	CAS	Proportion
Gasoline, natural	8006-61-9	90-100 %
Benzene	71-43-2	<1 %
diisopropyl ether	108-20-3	<1 %
Polycyclic Aromatic Hydrocarbons (PAHs)		<1 %
tert -butyl alcohol	75-65-0	<1 %
tert-butyl methyl ether	1634-04-4	<1 %

Section 4 - First Aid Measures

Inhalation

If inhaled, remove affected person from contaminated area. Apply artificial respiration if not breathing. Seek medical attention.

Ingestion

Do NOT induce vomiting. Wash out mouth and lips with water. Where vomiting occurs naturally have affected person place head below hip level in order to reduce risk of aspiration. Seek immediate medical attention.

Skin

Remove all contaminated clothing immediately. Wash affected area thoroughly with soap and water. Wash contaminated clothing before reuse or discard. Seek medical attention.

Eye

If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing for several minutes until all contaminants are washed out completely. Seek medical attention.

First Aid Facilities

Eyewash, safety shower and normal washroom facilities.

Advice to Doctor

Treat symptomatically.

Other Information

For advice in an emergency, contact a Poisons Information Centre (Phone Australia 131 126) or a doctor at once.

Section 5 - Firefighting Measures

Suitable Extinguishing Media

Carbon dioxide, dry chemical or foam.

Unsuitable Extinguishing Media

Do not use water in a jet.

Hazards from Combustion Products

Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including hydrocarbons, carbon monoxide, carbon dioxide and oxides of nitrogen.

Specific hazards arising from the chemical

Highly flammable liquid and vapour. Vapour/air mixtures may ignite explosively. Flashback along the vapour trail may occur. Runoff to sewer may create fire or explosion hazard.

Hazchem Code

3YE

Decomposition Temperature

Not available

Precautions in connection with Fire

Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. In case of fire the product may be violently or explosively reactive. Use water spray to disperse vapours. This product should be prevented from entering drains and watercourses.

Section 6 - Accidental Release Measures

Emergency Procedures

Wear appropriate personal protective equipment and clothing to prevent exposure. Extinguish or remove all sources of ignition and stop leak if safe to do so. Increase ventilation. Evacuate all unprotected personnel. If possible contain the spill. Place inert absorbent, non-combustible material onto spillage. Use clean non-sparking tools to collect the material and place into suitable labelled containers for subsequent recycling or disposal. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

Section 7 - Handling and Storage

Precautions for Safe Handling

Wear appropriate personal protective equipment and clothing to prevent exposure. Handle and use the material in a well-ventilated area, away from sparks, flames and other ignition sources. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Work from suitable, labelled, fire-resistant containers. Open containers carefully as they may be under pressure. Keep containers tightly closed. Flameproof equipment is necessary in areas where the product is being used. Take precautionary measures against static discharges. Earth or bond all equipment. Do not empty into drains. Ensure a high level of personal hygiene is maintained when using this product, that is, always wash hands before eating, drinking, smoking or using the toilet facilities. Avoid exposure. Do not handle until all safety precautions have been read and understood.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated area away from sources of ignition, foodstuffs, clothing and incompatible materials such as oxidising agents. Keep containers closed when not in use, securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks. Have appropriate fire extinguishers available in and near the storage area. Take precautions against static electricity discharges. Use proper grounding procedures. Ensure that storage conditions comply with applicable local and national regulations. For information on the design of the storeroom, reference should be made to Australian Standard AS1940 - The storage and handling of flammable and combustible liquids.

Section 8 - Exposure Controls and Personal Protection

Occupational exposure limit values

No exposure standards have been established for this material. However, the available exposure limits for ingredients are listed below:

Petrol (gasoline)

TWA: 900 mg/m³

Benzene

TWA: 1 ppm, 3.2 mg/m³

NOTE Carc. 1A

Diisopropyl ether

TWA: 250 ppm, 1040 mg/m³

STEL: 310 ppm, 1300 mg/m³

tert-Butyl alcohol

TWA: 100 ppm, 303 mg/m³

STEL: 150 ppm, 455 mg/m³

Methyl-tert butyl ether

TWA: 25 ppm, 92 mg/m³

STEL: 75 ppm, 107 mg/m³

TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.

STEL (Short Term Exposure Limit): The average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

Carc.1A: Known to have carcinogenic potential for humans.

Source: Safe Work Australia

Biological Monitoring

Benzene

Determinant: S-Phenylmercapturic acid in urine

Value: 25 µg/g creatinine

Sampling time: End of shift

Benzene

Determinant: t,t-Muconic acid in urine

Value: 500 µg/g creatinine

Sampling time: End of shift

Polycyclic aromatic hydrocarbons (PAHs)

Determinant: 1-Hydroxypyrene in urine with hydrolysis

Value: 2.5 µg/L (Adjusted for the Pyrene to Benzo(a)pyrene ratio of the PAH mixture to which workers are exposed)

Sampling time: End of shift at end of workweek

Polycyclic aromatic hydrocarbons (PAHs)

Determinant: 3-Hydroxybenzo(a)pyrene in urine with hydrolysis

Value: -

Sampling time: End of shift at end of workweek

Source: American Conference of Industrial Hygienists (ACGIH).

Control Banding

Not available

Engineering Controls

This substance is hazardous and should be used with a local exhaust ventilation system, drawing vapours away from workers' breathing zone. A flame-proof exhaust ventilation system is required. If the engineering controls are not sufficient to maintain

concentrations of vapours/mists below the exposure standards, suitable respiratory protection must be worn. Refer to relevant regulations for further information concerning ventilation requirements.

Refer to AS 1940 - The storage and handling of flammable and combustible liquids and AS/NZS 60079.10.1 Explosive atmospheres - Classification of areas - Explosive gas atmospheres, for further information concerning ventilation requirements.

Respiratory Protection

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements.

Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

Eye and Face Protection

Safety glasses with side shields, chemical goggles or full-face shield as appropriate should be used. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform to relevant regulations. Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 (series) - Eye Protectors for Industrial Applications.

Hand Protection

Wear gloves of impervious material such as PVA or Viton. Final choice of appropriate gloves will vary according to individual circumstances. i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant regulations.

Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

Thermal Hazards

No further relevant information available.

Body Protection

Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

Section 9 - Physical and Chemical Properties

Properties	Description	Properties	Description
Form	Liquid	Appearance	Yellow liquid
Colour	Yellow	Odour	Characteristic odour
Melting Point	Not available	Boiling Point	30 °C - 210 °C
Decomposition Temperature	Not available	Solubility in Water	Insoluble
Specific Gravity	0.74 - 0.76	pH	Not applicable
Vapour Pressure	67 kPa (37.8 °C)	Relative Vapour Density (Air=1)	3.5
Evaporation Rate	Not available	Odour Threshold	Not available
Viscosity	Not available	Volatile Component	Not available
Partition Coefficient: n-octanol/water (log value)	Not available	Flash Point	-40 °C (CC)
Flammability	Highly flammable	Auto-Ignition Temperature	> 370 °C
Explosion Limit - Upper	Not available	Explosion Limit - Lower	1.4 %
Explosion Properties	Not available	Oxidising Properties	Not available
Particle Characteristics	Not applicable		

Section 10 - Stability and Reactivity

Reactivity

Reacts with incompatible materials.

Chemical Stability

Stable under normal conditions of storage and handling.

Possibility of hazardous reactions

Reacts with incompatible materials.

Conditions to Avoid

Heat, open flames and other sources of ignition.

Incompatible Materials

Incompatible with oxidising agents (e.g. hypochlorites), acids (e.g. nitric acid), heat and ignition sources.

Hazardous Decomposition Products

Thermal decomposition may result in the release of toxic and/or irritating fumes, smoke and gases including: hydrocarbons and carbon oxides.

Hazardous Polymerization

Will not occur.

Section 11 - Toxicological Information

Toxicology Information

No toxicity data available for this material. The available acute toxicity data for the ingredient/s is/are given below.

Acute Toxicity - Oral

Gasoline

LD50 (mouse): 60 ml/kg

Benzene

LD50 (rat): 930 mg/kg

Diisopropyl ether

LD50 (rat): 8.47 g/kg

Tert-butyl alcohol

LD50 (female rats): 2743 mg/kg

Tert-butyl methyl ether

LD50 (rat): 4000 mg/kg

Acute Toxicity - Dermal

Benzene

LD50 (rabbit, guinea pig): > 9400 mg/kg

Tert-butyl alcohol

LD50 (rabbit): >2000 mg/kg

Tert-butyl methyl ether

LD50 (rat): >2000 mg/kg

Acute Toxicity - Inhalation

Benzene

LD50 (mouse): 9980 ppm/7hrs

Diisopropyl ether

LC50 (rabbit): 121 g/m³

Tert-butyl alcohol

LC50 (rat): > 10000 ppm/4hrs

Tert-butyl methyl ether

LC50 (rat): 23576 ppm/4hrs

Ingestion

May be fatal if swallowed and enters airways. Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause severe pulmonary injury that may lead to death. May cause irritation to the mouth, throat, esophagus and stomach with symptoms of nausea, abdominal discomfort, vomiting and diarrhoea.

Inhalation

May cause irritation to the mucous membrane and upper airways, especially where vapours or mists are generated. Symptoms include sneezing, coughing, wheezing, shortness of breath, headache, dizziness, drowsiness, nausea and vomiting.

Skin

Causes skin irritation. Skin contact will cause redness, itching and swelling. Repeated exposure may cause skin dryness and cracking and may lead to dermatitis.

Eye

Causes serious eye irritation. On eye contact this product will cause tearing, stinging, blurred vision, and redness.

Respiratory Sensitisation

Not expected to be a respiratory sensitiser.

Skin Sensitisation

Not expected to be a skin sensitiser.

Germ Cell Mutagenicity

May cause genetic defects. Classified as Known or presumed to induce heritable mutations.

Several studies have demonstrated induction of both numerical and structural chromosomal aberrations, sister chromatid exchanges and micronuclei in experimental animals and humans after in vivo benzene exposure.

Carcinogenicity

May cause cancer. Classified as a Known or presumed human carcinogen.

Benzene and automotive gasoline are listed as a Group 1: Carcinogenic to humans according to International Agency for Research on Cancer (IARC).

Engine exhaust, gasoline and methyl tert-butyl ether are listed as a Group 2B: Possibly carcinogenic to humans according to International Agency for Research on Cancer (IARC).

Diisopropyl ether and tert-butyl alcohol are listed as a Group 3: Not classifiable as to carcinogenicity to humans according to International Agency for Research on Cancer (IARC).

Reproductive Toxicity

Not considered to be toxic to reproduction.

STOT - Single Exposure

May cause drowsiness or dizziness.

STOT - Repeated Exposure

Causes damage to organs through prolonged or repeated exposure.

Aspiration Hazard

May be fatal if swallowed and enters airways.

Section 12 - Ecological Information

Ecotoxicity

No ecological data available for this material. Expected to be toxic to aquatic organisms. Films formed on water may affect oxygen transfer and damage organisms.

Persistence and degradability

Major components are expected to be inherently biodegradable. Persists under anaerobic conditions. The volatile components oxidise rapidly by photochemical reactions in air. May contain components with the potential to bioaccumulate.

Mobility

Floats on water. Contains volatile components. Evaporates within a day from water or soil surfaces. Large volumes may penetrate soil and could contaminate groundwater.

Bioaccumulative Potential

May have the potential to bioaccumulate.

Other Adverse Effects

Not available

Environmental Protection

Do not discharge this material into waterways, drains and sewers.

Hazardous to the Ozone Layer

This product is not expected to deplete the ozone layer.

Section 13 - Disposal Considerations

Disposal Considerations

Dispose of waste according to applicable local and national regulations. Labels should not be removed from containers until they have been cleaned. Advise flammable nature. Empty containers may contain flammable residues. Do not cut, puncture or weld on or near containers. Contaminated containers must not be treated as household waste. Containers should be cleaned by appropriate methods and then re-used or disposed of by landfill or incineration as appropriate. Do not incinerate closed containers. Wastes including emptied containers are controlled wastes and should be disposed of in accordance with all applicable local and national regulations. Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. To minimise personal exposure to the chemical, refer to Section 8—Exposure Controls and Personal Protection.

Section 14 - Transport Information

Transport Information

Road and Rail Transport (ADG Code):

This material is a Class 3 - Flammable Liquid according to The Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Class 3 - Flammable Liquids are incompatible in a placard load with any of the following:

- Class 1, Explosives
- Division 2.1, Flammable Gases, (Division 2.1 and Class 3 are incompatible in transport if both are in tanks or other receptacles with a capacity individually exceeding 500 L.)
- Division 2.3, Toxic Gases
- Division 4.2 Spontaneously Combustible Substances
- Division 5.1 Oxidising Agents and Division 5.2, Organic Peroxides
- Class 6 Toxic or Infectious Substances (where the flammable liquid is nitromethane)
- Class 7: Radioactive materials unless specifically exempted

Marine Transport (IMO/IMDG):

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Class/Division: 3

UN No: 1203

Proper Shipping Name: GASOLINE

Packing Group: II

EMS: F-E, S-E

Special Provisions: 243

Air Transport (ICAO/IATA):

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Class/Division: 3

UN No: 1203

Proper Shipping Name: Gasoline

Packing Group: II

Packaging Instructions (passenger & cargo): 353

Packaging Instructions (cargo only): 364

Hazard Label: Flammable Liquid

Special Provisions: A100

UN Number

1203

Proper Shipping Name

GASOLINE

Transport Hazard Class

3

Packing Group

II

Hazchem Code

3YE

IERG Number

14

Special Precautions for User

Not available

IMDG Marine pollutant

No

Transport in Bulk

Not available

Section 15 - Regulatory Information

Regulatory Information

Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Not classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP). Exempted.

Motor, heating or furnace fuels are a general exemption to the poison schedule except when petrol or kerosene are packed in containers having a capacity of 20 L or less. This product will be classified as a schedule 5 poison if packed in containers having a capacity of 20 L or less.

Poisons Schedule

Not Scheduled

Montreal Protocol

Not listed

Stockholm Convention

Not listed

Rotterdam Convention

Not listed

International Convention for the Prevention of Pollution from Ships (MARPOL)

Not available

Agricultural and Veterinary Chemicals Act 1994

Not available

Basel Convention

Not listed

Section 16 - Any Other Relevant Information

Date of Preparation

SDS Created: November 2025

Version Number

1.0

Literature References

Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice.

Standard for the Uniform Scheduling of Medicines and Poisons.

Australian Code for the Transport of Dangerous Goods by Road & Rail.

Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.

Code of Practice for Supply Diversion into Illicit Drug Manufacture.

National Code of Practice for Chemicals of Security Concern.

Agricultural Compounds and Veterinary Chemicals Act.

International Agency for Research on Cancer (IARC) Monographs.

Montreal Protocol on Substances that Deplete the Ozone Layer.

Stockholm Convention on Persistent Organic Pollutants (POPs).

Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade.

Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal.

International Air Transport Association (IATA) Dangerous Goods Regulations.

International Maritime Dangerous Goods (IMDG) Code.

Workplace exposure standards for airborne contaminants.

Adopted biological exposure determinants, American Conference of Industrial Hygienists (ACGIH).

Globally Harmonised System of Classification and Labelling of Chemicals (7th revised edition).

Code of Practice: Managing Noise and Preventing Hearing Loss at Work.

END OF SDS

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