

Pri

NOHSC 16 Section

# Material Safety Data Sheet

VORTEX 98

**Infosafe™** LPTL5 **Issue Date** May 2009 **Status** ISSUED by BS:  
**No.** CALTEX 1.10.9

Classified as hazardous according to criteria of NOHSC

---

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

---

**Product Name** VORTEX 98

**Product Code** 103

**Company Name** Caltex Australia Petroleum Pty Ltd (ABN 17 000 032 128)

**Address** 2 Market Street, Sydney  
NSW 2000

**Emergency Tel.** 1800 033 111

**Telephone/Fax Number** Tel: (02) 9250 5000  
Fax: (02) 9250 5742

**Recommended Use** Fuel

**Other Names** Not Available

---

## 2. HAZARDS IDENTIFICATION

---

**Hazard** HAZARDOUS SUBSTANCE.  
**Classification** DANGEROUS GOODS.

Hazard classification according to the criteria of NOHSC.  
 Dangerous goods classification according to the Australia  
 Dangerous Goods Code.

**Risk Phrase(s)** R11 Highly flammable.  
 R65 Harmful: may cause lung damage if swallowed.  
 R45(1) May cause cancer.  
 R46(1) May cause heritable genetic damage.  
 R48/20/21/22 Harmful: danger of serious damage to health by  
 prolonged exposure through inhalation, in contact with skin  
 and if swallowed.

**Safety Phrase** S2 Keep out of reach of children.  
**(s)** S16 Keep away from sources of ignition - No smoking.  
 S23 Do not breathe gas/fumes/vapour/spray  
 S24 Avoid contact with skin.  
 S53 Avoid exposure - obtain special instructions before  
 use.  
 S62 If swallowed, do not induce vomiting; seek medical  
 advice immediately and show this container or label.

---

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

---

Ingredients	Name	CAS	Proportion
	Petroleum Hydrocarbon	8006-61-9	90-100 %
	Benzene	71-43-2	0-1 %

---

### 4. FIRST AID MEASURES

---

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

<b>Ingestion</b>	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.
<b>Skin</b>	Wash affected area thoroughly with soap and water. Remove contaminated clothing and wash before reuse or discard. Seek medical attention.
<b>Eye</b>	If in eyes, hold eyelids apart and flush the eyes continuously with running water. Continue flushing for several minutes until all contaminants are washed out completely. If symptoms develop and persist seek medical attention.
<b>First Aid Facilities</b>	An eye wash fountain, safety shower and a general washing facility.
<b>Advice to Doctor</b>	Treat symptoms with reference to specific health effects.
<b>Other Information</b>	For advice in an emergency, contact a Poisons Information Centre (Phone Australia 13 1126; New Zealand 0800 POISON / 0800 764 766) or a doctor at once.

---

## 5. FIRE FIGHTING MEASURES

---

<b>Suitable Extinguishing Media</b>	Carbon dioxide, dry chemical, foam.
<b>Hazards from Combustion Products</b>	Under fire conditions this product may emit toxic and/or irritating fumes and gases including carbon monoxide and carbon dioxide.
<b>Specific Hazards</b>	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.
<b>Hazchem Code</b>	3YE

**Precautions in connection with Fire** 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.

---

## 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 authorities and EPA in accordance with local regulations.

---

## 7. HANDLING AND STORAGE

---

**Precautions for Safe Handling** Wear appropriate protective clothing and equipment to prevent inhalation, skin and eye 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 closed when not in use. 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.

**Conditions for Safe Storage** Store in a cool, dry, well-ventilated area away from sources of ignition, oxidising agents, strong acids, foodstuffs, and clothing. Keep containers closed when not in use and 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. 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. Reference should also be made to all applicable local and national regulations.

**Other Information**

---

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

---

**National Exposure Standards**

No exposure value assigned for this specific material by the National Occupational Health and Safety Commission (NOHSC), Australia. However, the available exposure limits for ingredients are listed below:

National Occupational Health And Safety Commission (NOHSC), Australia Exposure Standards:

Substance TWA STEL NOTICES

ppm mg/m<sup>3</sup> ppm mg/m<sup>3</sup>

Petroleum hydrocarbon - 900 - -

Benzene 1 3.2 - -

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.

**Biological Limit Values**

No biological limit allocated.

**Engineering Controls**

Provide sufficient ventilation to keep airborne levels below the exposure limits. Where vapours or mists are generated, particularly in enclosed areas, and natural ventilation is inadequate, a flameproof exhaust ventilation system is required. Refer to AS 1940 - The storage and handling of flammable and combustible liquids and AS/NZS 2430.3.1:1997 : Classification of hazardous areas - Examples of area classification - General, 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 organic vapour filter should be used. Reference should be made to Australian/New Zealand 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 Protection**

Safety glasses with side shields or chemical goggles should be worn. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.

**Hand Protection**

Wear gloves of impervious material. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

**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. Industrial clothing should conform to the specifications detailed in AS/NZS 2919: Industrial clothing.

---

## 9. PHYSICAL AND CHEMICAL PROPERTIES

---

**Appearance**

Yellow mobile liquid

**Odour** Characteristic odour

**Melting Point** Not available

**Boiling Point** 30 - 210°C

**Solubility in Water** Insoluble

**Specific Gravity** 0.74-0.78 at 15°C

**pH Value** Not applicable

**Vapour Pressure** 67 kPa at 37.8°C

**Evaporation Rate** Not available

**Viscosity** Not available

**Flash Point** -40°C (CC)

**Flammability** Highly Flammable.

**Auto-Ignition Temperature** 370°C

**Flammable Limits - Lower** 1.4%

**Flammable Limits - Upper** 7.6%

---

## 10. STABILITY AND REACTIVITY

---

**Chemical Stability** Stable under normal conditions of storage and handling.

**Conditions to Avoid** Heat, direct sunlight, open flames or other sources of ignition.

**Incompatible  
Materials**

Strong oxidizing agents.

**Hazardous  
Decomposition  
Products**

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

**Hazardous  
Reactions**

May react vigorously with oxidising materials.

**Hazardous  
Polymerization**

Will not occur.

---

## 11. TOXICOLOGICAL INFORMATION

---

**Toxicology  
Information**

Limited chronic inhalation toxicology studies showed kidney disease, kidney cancer, and liver cancer in animals following exposure to wholly vapourised petrol. Additional studies limited to the volatile fraction of petrol have not resulted in kidney damage, which is generally considered to be a precursor to kidney cancer. Many scientists do not believe that the male rat is an appropriate animal model or predictor of human kidney cancer.

Epidemiology studies in humans exposed to hydrocarbons have not indicated excess risk of kidney or liver cancer. Petrol contains benzene in concentrations from about 0.5 to 4.0 %. Chronic toxicology studies in laboratory animals and certain epidemiology studies have indicated that excessive benzene exposure may cause cancer of the blood-forming organs including leukaemia. While the benzene content of petrol is relatively low, it is important to minimise exposure to the skin and respiratory system to well within current exposure standards. Engineering controls including full enclosure, vapour recovery, or local exhaust ventilation are recommended where routine exposure may exceed applicable standards.

**Inhalation**

Vapours may cause headache, nausea with vomiting, dizziness, confusion and other effects of central nervous system depression. Loss of consciousness can occur at high concentrations followed by convulsions and death.



<b>Ingestion</b>	Harmful-may cause lung damage if swallowed. 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.
<b>Skin</b>	May be irritating to skin. The symptoms may include redness, itching and swelling.
<b>Eye</b>	May cause irritation in contact with the eyes, which may result in redness, stinging and lachrymation.
<b>Chronic Effects</b>	Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.
<b>Mutagenicity</b>	This material is classified as a Category 2 Mutagen according to National Occupational Health And Safety Commission (NOHSC). That is, there is sufficient evidence, generally on the basis of appropriate animal studies and other relevant information, to provide a strong presumption that human exposure can result in the development of heritable genetic damage. Category 2 Mutagens are substances that should be regarded as if they are mutagenic to humans.
<b>Carcinogenicity</b>	May cause cancer. Product contains benzene. Benzene has been classified by the International Agency for Research on Cancer (IARC) as Carcinogenic to Humans (Group 1).

---

## 12. ECOLOGICAL INFORMATION

---

<b>Ecotoxicity</b>	Not available
<b>Persistence / Degradability</b>	Not available
<b>Environment Protection</b>	Do not discharge this material into waterways, drains and sewers.

---

---

## 13. DISPOSAL CONSIDERATIONS

---

**Disposal Considerations** The disposal of the spilled or waste material must be done in accordance with applicable local and national regulations.

---

## 14. TRANSPORT INFORMATION

---

**Transport Information** This material is classified as a Class 3 (Flammable Liquids) Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. Class 3 Dangerous Goods are incompatible in a placard load with any of the following:

- Class 1, Explosives
- Class 2.1, Flammable Gases, if both the Class 3 and Class 2.1 dangerous goods are in bulk
- Class 2.3, Toxic Gases
- Class 4.2, Spontaneously Combustible Substances
- Class 5.1, Oxidising Agents
- Class 5.2, Organic Peroxides
- Class 6, Toxic and Infectious Substances, if the Class 3 dangerous goods are nitromethane
- Class 7, Radioactive Substances

**U.N. Number** 1203

**Proper Shipping Name** MOTOR SPIRIT

**DG Class** 3

**Hazchem Code** 3YE

**Packing Group** II

**EPG Number** 3.1.001

**IERG Number** 14

---

## 15. REGULATORY INFORMATION

---

<b>Regulatory Information</b>	Classified as Hazardous according to criteria of National Occupational Health & Safety Commission (NOHSC), Australia. Not classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).
<b>Poisons Schedule</b>	Not Scheduled
<b>Packaging &amp; Labelling</b>	Fuels are exempt from the Standard for the Uniform Scheduling of Drugs and Poisons, except when packed in containers having a capacity of 20 litres or less. Classified as a Scheduled (S5) Poison using the criteria in the SUSDP (Standard for the Uniform Scheduling of Drugs and Poisons) when used for other applications rather than as a fuel.
<b>Hazard Category</b>	Toxic, Highly Flammable

---

## 16. OTHER INFORMATION

---

<b>Date of preparation or last revision of MSDS</b>	MSDS Reviewed: May 2009 Supersedes: September 2004
<b>Contact Person/Point</b>	CHEMICAL EMERGENCIES: 1 800 033 111 TECHNICAL ADVICE: 1300 364 169 Health & Safety Advisor Tel: (02) 9250 5822 and (02) 9250 5734 PLEASE NOTE that although every care has been taken in compiling the above information, it is solely reliant upon data available to us at the date hereof. We believe the data to be correct, however for the reason just stated we are not in a position to warrant its accuracy. With that in mind and given that the full range of possibilities and conditions under which the information may be applied simply cannot be anticipated, YOU ARE CAUTIONED to make your own determinations as to the veracity and the suitability of the information to the particular circumstances that apply, or may apply, to you from time to

time. Consistent with that approach it is recommended that where you have a particular purpose which would necessitate a reliance on information of the nature herein you obtain your own independent expert advice particularly structured to the relevant purpose. If this material is printed, circulated, distributed or copied in any manner, it is not to be modified without prior written permission, and further, it is to include the wording of the above disclaimer.

---

End of MSDS

---

(C) Copyright ACOHS Pty Ltd

Copyright in the source code of the HTML, PDF, XML, XFO and any other electronic files rendered by an Infosafe system for Infosafe MSDS displayed is the intellectual property of Acohs Pty Ltd.

Copyright in the layout, presentation and appearance of each Infosafe MSDS displayed is the intellectual property of Acohs Pty Ltd.

The compilation of MSDS's displayed is the intellectual property of Acohs Pty Ltd.

Copying of any MSDS displayed is permitted for personal use only and otherwise is not permitted. In particular the MSDS's displayed cannot be copied for the purpose of sale or licence or for inclusion as part of a collection of MSDS without the express written consent of Acohs Pty Ltd.

Print Date: 11/12/2011

BS: 1.10.9