

# Material Safety Data Sheet

Infosafe No. CAS0V Issue Date: April 2004 ISSUED by CASTROL  
Product Name: **Castrol Optigear 46**

**Not classified as hazardous according to criteria of NOHSC**

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## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

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### Product Name

Castrol Optigear 46

### Product Use

Gear lubricant.

### Company Name

Castrol Australia Pty. Limited (ABN 87 008 459 407)

### Address

132 McCredie Road, Guildford,  
NSW, 2161 Australia

### Emergency Tel.

1800 638 556

### Telephone Number/Fax

Tel: (02) 9795 4800 Fax: (02) 9795 4910

### Other Information

Castrol Technical Help Line 1300 557 998 (Local call)

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## 2. COMPOSITION/INFORMATION ON INGREDIENTS

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<b>Ingredients</b>	<b><u>Name</u></b>	<b><u>CAS</u></b>	<b><u>Proportion</u></b>
	Ingredients determined not to be hazardous	Not required	100 %

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## 3. HAZARDS IDENTIFICATION

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Not classified as hazardous according to NOHSC criteria.  
Not classified as a dangerous good according to the ADG Code.

### Risk Phrases

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### Safety Phrases

Product Name : Castrol Optigear 46

S61 Avoid release to the environment. Refer to special instructions/safety data sheet.

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#### 4. FIRST AID MEASURES

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##### **Inhalation**

Remove the source of contamination or move the victim to fresh air. Ensure airways are clear and have qualified person give oxygen through a facemask if breathing is difficult. If irritation develops and persists, seek medical attention.

##### **Ingestion**

DO NOT induce vomiting. Immediately wash out mouth with water. Seek medical attention.

##### **Skin**

Remove contaminated clothing. Wash gently and thoroughly with water and non-abrasive soap. Ensure contaminated clothing is washed before re-use or discard. If irritation develops, seek medical attention.

##### **Eye**

If contact with the eye(s) occur, wash with copious amounts of water, holding eyelids(s) open. Take care not to rinse contaminated water into the non-affected eye. If irritation develops and persists, seek medical attention.

##### **First Aid Facilities**

Eye wash and normal washroom facilities.

##### **Advice to Doctor**

Treat symptomatically.

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#### 5. FIRE FIGHTING MEASURES

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##### **Extinguishing Media**

Carbon dioxide, foam or dry chemical.  
Do NOT use water jets. Cool fire exposed containers with water spray.

##### **Specific Hazards**

Combustible C2 liquid. Fire-exposed container may rupture/explode.

##### **Hazardous**

##### **Combustion Products**

Under fire conditions this product may emit toxic and/or irritating fumes including oxides of carbon, oxides of nitrogen, oxides of sulphur, phosphates and metallic oxides.

##### **Precautions in connection with Fire**

Self-Contained Breathing Apparatus (S.C.B.A) and full protective clothing should be worn to minimise exposure.

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## 6. ACCIDENTAL RELEASE MEASURES

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Remove all sources of ignition. Increase ventilation. Evacuate all unnecessary personnel. Wear full protective equipment and clothing to minimise exposure. If possible contain the spill. Place inert, non combustible, absorbent material onto spillage. Use clean non-sparking tools to collect the material and place into a suitable labelled container. If large quantities of this material enter the waterways contact the Environmental Protection Authority, or your local Waste Management Authority.

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## 7. HANDLING AND STORAGE

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### Corrosiveness

Not corrosive to aluminium.

### Handling

Repeated or prolonged contact with this material should be avoided in order to lessen the possibility of skin disorders. It is essential that all who come into contact with this material maintain high standards of personal hygiene ie. washing hands prior to eating, drinking or going to the toilet. Build-up of mists in the working atmosphere must be prevented.

Misuse of empty containers can be hazardous. Do not cut, weld, heat or drill containers. Residue may ignite with explosive violence if heated sufficiently. Do not pressurise or expose to open flame or heat. Keep container closed and bung in place.

### Storage

Combustible C2 liquid for storage and handling purposes. Store in a cool, dry, well-ventilated area, out of direct sunlight. Avoid sparks, flames, and other ignition sources. Store away from incompatible materials such as materials that support combustion (oxidising materials). Reference should be made to Australian Standard AS1940- The storage and handling of flammable and combustible liquids.

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## 8. EXPOSURE CONTROLS, PERSONAL PROTECTION

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### Exposure Limits

No exposure standards have been established for this material by the National Occupational Health And Safety Commission (NOHSC).

### Respiratory Protection

Avoid breathing of vapours or mists. Where ventilation is inadequate and vapours or mists are generated the use of an approved respirator with organic vapour/particulate filter complying with AS/NZS 1715 and AS/NZS 1716 is recommended; however final choice of appropriate breathing protection is dependant upon actual airborne concentrations and the type of breathing protection required will vary according to individual circumstances. Expert

advice may be required to make this decision. 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.

**Eye Protection**

Safety glasses with side shields, goggles or full-face shield as appropriate recommended. Final choice of appropriate eye/face protection will vary according to individual circumstances i.e. methods of handling or engineering controls and according to risk assessments undertaken. Eye protection 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**

Wear appropriate clothing including chemical resistant apron where clothing is likely to be contaminated. It is advisable that a local supplier of personal protective clothing is consulted regarding the choice of material.

**Eng. Controls**

Natural ventilation should be sufficient, however where vapours or mists are generated the use of a local exhaust ventilation system (drawing vapours/mists away from workers breathing zone) is recommended.

**Other Information**

No biological limit allocated.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

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**Appearance**

Dark green liquid.

**Odour**

Mild odour.

**Melting Point**

Not available.

**Boiling Point**

Not available.

**Solubility in Water**

Insoluble

**Specific Gravity**

(H<sub>2</sub>O=1)

1.0 @ 20°C

**pH Value**

Not applicable.

**Vapour Pressure**

Product Name : Castrol Optigear 46

0.01 kPa @ 20°C

**Vapour Density**

(Air=1)

Not applicable

**Pour Point**

-27°C

**Flash Point**

194°C (Cleveland Open Cup)

**Flammability**

Classified as a Class C2 (COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the requirements of AS1940. Remove all sources of heat and ignition.

**Flammable Limits LEL**

Not available.

**Flammable Limits UEL**

Not available.

**Kinematic Viscosity**

45 mm<sup>2</sup>/s @ 40°C

7 mm<sup>2</sup>/s @ 100°C

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**10. STABILITY AND REACTIVITY**

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**Stability**

Stable under normal conditions.

**Hazardous****Polymerization**

Will not occur.

**Materials to Avoid**

Strong oxidising agents.

**Hazardous****Decomposition****Products**

Thermal decomposition and combustion produce noxious fumes containing oxides of carbon.

**Hazardous Reaction**

Hazardous reaction with strong oxidising agents.

**Conditions to Avoid**

Heat, direct sunlight, open flames or other sources of ignition.

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**11. TOXICOLOGICAL INFORMATION**

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**Toxicology  
Information**

No toxicity data is available for this material. No component of this product at levels greater than 0.1% is identified as a carcinogen by the International Agency for Research on Cancer (IARC).

**Inhalation**

May cause irritation to the mucous membrane and upper airways, where material is heated and is used in poorly ventilated areas. Symptoms may include headache, dizziness and nausea.

**Ingestion**

May cause irritation of the gastrointestinal system. Symptoms may include nausea, vomiting and diarrhoea.

**Skin**

May cause irritation in contact with the skin, which may result in redness and itchiness, possibly leading to dermatitis.

**Eye**

May cause eye irritation, resulting in redness, stinging and lachrymation.

**Chronic Effects**

Prolonged or repeated contact with this material may result in skin irritation possibly leading to dermatitis.

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**12. ECOLOGICAL INFORMATION**

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No ecological data is available for this material.

**Environ. Protection**

Prevent this material from entering the environment.

**Mobility**

Non-volatile. Liquid. Insoluble in water.

**Persistence /  
Degradability**

This product is inherently biodegradable.

**Bioaccumulation**

No data available for this specific product.

**Acute Toxicity –****Fish**

LC50 (96 hr, fish) = 9 mg/L

**Acute Toxicity –****Algae**

EC50 (24 hr, algae) = 7 mg/L

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**13. DISPOSAL CONSIDERATIONS**

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Dispose of waste according to federal, E.P.A. and state regulations. Assure conformity with all applicable regulations.

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#### 14. TRANSPORT INFORMATION

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Not classified as a Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

**U.N. Number**

None Allocated

**Proper Shipping Name**

None Allocated

**DG Class**

None Allocated

**Hazchem Code**

None Allocated

**Packing Group**

None Allocated

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#### 15. REGULATORY INFORMATION

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**Risk Phrase**

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Safety Phrase**

S61 Avoid release to the environment. Refer to special instructions/safety data sheet.

**Poisons Schedule**

Not Scheduled

**Hazard Category**

Dangerous for the environment

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#### 16. OTHER INFORMATION

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**Contact Person/Point**

For information concerning details on this Safety Data Sheet contact your local Technical Services Manager on the following numbers:-

Sydney: (02) 9795 4800  
Melbourne: (03) 9268 4200  
Brisbane: (07) 3850 9300  
Adelaide: (08) 8347 6200  
Perth: (08) 9268 9288

Castrol Technical Help Line 1300 557 998 (Local call)

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24 HOUR EMERGENCY CONTACT

1 800 638 556

24 HOUR EMERGENCY CONTACT (New Zealand Only)

0800 154 666

**SDS History**

MSDS Creation: April 2004

**...End Of MSDS...**