Material Safety Data Sheet

Infosafe No. CASON Issue Date: April 2004 ISSUED by CASTROL

Product Name: Castrol Optimol SHF Spray

Not classified as hazardous according to criteria of NOHSC

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Product Name

Castrol Optimol SHF Spray

Product Use

Lubricant (Aerosol).

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)

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	<u>Name</u>	<u>CAS</u>	Proportion
	Butane	106-97-8	20-50 %
	Naphtha (petroleum), hydrodesulfurized light, dearomatized	92045-53-9	10–20 %
	Propane	74-98-6	5-10 %
	Naphtha (Petroleum), Hydrotreated Light	64742-49-0	5-10 %
	Ethyl acetate	141-78-6	1-5 %
	Other ingredients determined not to be hazardous	Not required	Balance

3. HAZARDS IDENTIFICATION

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

Risk phrases:

R12 Extremely Flammable.

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

R66 Repeated exposure may cause skin dryness and cracking.

R67 Vapours may cause drowsiness and dizziness.

Safety phrases:

S16 Keep away from sources of ignition - No smoking.

S23 Do not breathe gas/fumes/vapour/spray.

S24/25 Avoid contact with skin and eyes.

S33 Take precautionary measures against static discharges.

S51 Use only in well ventilated areas.

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

4. FIRST AID MEASURES

Inhalation

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

Ingestion

DO NOT INDUCE VOMITING. Wash out mouth with water. If symptoms develop seek medical attention.

Skin

Remove all 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 and persists seek medical attention.

Eye

If contact with the eye(s) occurs, wash with copious amounts of water holding eyelid(s) open. Take care not to rinse contaminated water into the non-affected eye. If symptoms persist seek medical attention.

First Aid Facilities

Eye wash fountains and normal wash room facilities.

Advice to Doctor

Treat symptomatically.

5. FIRE FIGHTING MEASURES

Extinguishing Media

Carbon dioxide, dry chemical, or foam. Cool aerosol cans with water spray. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Specific Hazards

Flammable Gas. Keep away from all sources of ignition, heat and naked flames. Cans may explode in fire conditions. Ensure adequate ventilation to prevent formation of an explosive mixture with vapour from aerosol and air. Dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material.

Hazardous

Combustion Products

Oxides of carbon (CO, CO2).

Precautions in

connection with Fire

Wear Self-Contained Breathing Apparatus (S.C.B.A) and full protective clothing to minimise skin exposure.

6. ACCIDENTAL RELEASE MEASURES

Liquid content:

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 absorbent material such as vermiculite, sand or dirt onto spillage. Use clean non-sparking tools to collect the material and place into a suitable labelled container. Do not dilute material but contain. If large quantities of this material enter the waterways contact the Environmental Protection Authority, or your local Waste Management Authority.

7. HANDLING AND STORAGE

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 i.e. washing hands prior to eating, drinking, smoking or going to the toilet. Build-up of mist in the working atmosphere must be prevented. Ensure ventilation is adequate. Prevent concentration in hollows or sumps. DO NOT enter confined spaces where vapour may have collected. Prevent accumulation of static electricity and earth all equipment.

Contents are under pressure, DO NOT puncture. Do NOT spray into or near open flame. Do NOT spray on extremely hot surfaces.

Storage

The product should be stored in a cool, dry, well ventilated area, away from sources of ignition and oxidising agents. Do NOT puncture, pressurise, cut or heat aerosol containers. Content is under pressure and can explode violently.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Exposure Limits	<u>Name</u>	mg/m3 (STEL)	ppm (STEL)	mg/m3 (TWA)	ppm (TWA)	TWA <u>Footnote</u>
	Butane			1900	800	NOHSC
	Ethyl acetate			720	200	

Other Exposure Information

No value assigned for this specific material by the National Occupational Health and Safety Commission (NOHSC). However, Exposure Standards for the constituents, butane and ethyl acetate are listed above and oil mist is listed below.

SUBSTANCE

TWA

STEL

Note: Propane is an asphyxiant gas, which when present in an atmosphere in high concentration, leads to reduction of oxygen concentration by displacement or dilution. It is not appropriate to recommend an exposure standard for an asphyxiant, rather it should be required that a sufficient oxygen concentration be maintained.

Respiratory

Protection

Use only with adequate ventilation. Avoid breathing of vapours, mists or spray. Industrial applications: 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. 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

Provide sufficient ventilation to keep airborne levels below the exposure limit. Where vapours or mists are generated, particularly in enclosed areas, and natural ventilation is inadequate, an explosion proof ventilation system is required. Refer to AS 2430-Explosive gas atmospheres for further information concerning ventilation requirements.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Aerosol.

Odour

Mild odour.

Melting Point

Not applicable

Boiling Point

35°C

Solubility in Water

Insoluble

Specific Gravity

(H2O=1)

1.0 @ 20°C

pH Value

Not applicable

Vapour Pressure

2,025 mmHg

Vapour Density

(Air=1)

Not available

Volatile Component

25%

Flash Point

-60°C (CLOSED CUP)

Flammability

FLAMMABLE GAS: Contains flammable propellants. Do NOT spray into or near open flame. Do NOT spray on extremely hot surfaces. Remove all sources of ignition, heat and naked flames. May emit toxic fumes under fire conditions. Vapours

emitted can form flammable mixtures with air.

Flammable Limits LEL

0.5%

Flammable Limits UEL

10%

10. STABILITY AND REACTIVITY

Stability

Stable under normal conditions.

Hazardous

Polymerization

Will not occur.

Materials to Avoid

Strong oxidising agents.

Hazardous

Decomposition

Products

Oxides of carbon.

Conditions to Avoid

Avoid all possible sources of ignition (spark or flame). High temperature.

11. TOXICOLOGICAL INFORMATION

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. Symptoms may include intoxication, loss of control, stupor and breathing difficulties.

Ingestion

Not a likely source of exposure. If liquid content is ingested, may cause irritation to the mouth, oesophagus and stomach. Symptoms may include nausea, vomiting and diarrhoea. May also cause aspiration leading to lung damage.

Skin

May cause redness, itching, irritation and drying or defatting of the skin that may lead to dermatitis.

Eye

Eye contact and high concentrations of solvent vapour may cause eye irritation, including redness, lachrymation, stinging and swelling.

Chronic Effects

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

12. ECOLOGICAL INFORMATION

Environ. Protection

Prevent this material from entering the environment.

Mobility

Data not available

Persistence /

Degradability

Data not available

Bioaccumulation

Data not available

Ecotoxicity

Data not available

13. DISPOSAL CONSIDERATIONS

Dispose of waste according to federal, E.P.A. and state regulations. Assure conformity with all applicable regulations. Do not puncture or incinerate can, even when empty.

14. TRANSPORT INFORMATION

This material is classified as a Class 2.1 (Flammable Gas) Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road or Rail. Dangerous goods of Class 2.1 (Flammable Gas) are incompatible in a placard load with any of the following:

- Class 1, Explosive
- Class 3, Flammable Liquid, if both the Class 2.1 and Class 3 dangerous goods are in bulk
- Class 4.1, Flammable Solid
- Class 4.2, Spontaneously Combustible Substance
- Class 4.3, Dangerous When Wet Substance
- Class 5.1, Oxidising Agent
- Class 5.2, Organic Peroxide
- Class 7, Radioactive Substance

U.N. Number

1950

Proper Shipping Name

AEROSOLS

DG Class

2.1

Packaging Method

5.9.2

EPG Number

2D1

IERG Number

49

15. REGULATORY INFORMATION

Risk Phrase

R12 Extremely Flammable.

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

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Safety Phrase

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

Poisons Schedule

Not Scheduled

Hazard Category

Extremely Flammable, Dangerous for the environment

16. OTHER INFORMATION

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)

IMPORTANT DISCLAIMER

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no tortious or contractual liability for any loss or damages suffered as a consequence of reliance on the information and advice contained herein. 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...