

Material Safety Data Sheet

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Infosafe No. CAS6W Issue Date : October 2004 ISSUED by CASTROL

Product Name : **MOLUB-ALLOY OPEN GEAR GREASE AEROSOL (MOGA)**

Classified as hazardous according to criteria of NOHSC

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Product Name MOLUB-ALLOY OPEN GEAR GREASE AEROSOL (MOGA)
Product Code 114032
Product Use Aerosol lubricant.
Company Name Castrol Australia Pty. Limited (ABN 87 008 459 407)
Address 132 McCredie Road, Guildford,
NSW, 2161
Emergency Tel. 1800 638 556
Telephone Tel: (02) 9795 4800 Fax: (02) 9795 4910
Number/Fax
Other Information Castrol Technical Help Line 1300 557 998 (Local call)

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	Name	CAS	Proportion
	Xylene	1330-20-7	25-30 %
	Propane	74-98-6	15-20 %
	Carbon black	1333-86-4	5-10 %
	Antimony, tris(dipentylcarbamodit hioato-S,S')-, (OC-6-11)-	15890-25-2	0.1-1 %

3. HAZARDS IDENTIFICATION

Classified as hazardous according to NOHSC criteria.
Classified as a dangerous good according to the ADG Code.

Risk phrases:

R12 Extremely Flammable.
R20/21 Harmful by inhalation and in contact with skin.
R38 Irritating to skin.

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.

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 or consult a Poisons Information Centre (Phone 131 126).

Other Information For advice, contact a Poisons Information Centre (Phone eg Australia 131 126; New Zealand 0800 764 766) or a doctor (at once).

5. FIRE FIGHTING MEASURES

Extinguishing Media Carbon dioxide, dry chemical, or foam.
Cool aerosol cans with water spray. Do NOT use water jets.

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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	Under fire conditions this product may emit toxic and/or irritating fumes including carbon monoxide, carbon dioxide, oxides of sulfur and some metallic oxides.
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	Name	STEL		TWA		Footnote
		mg/m ³	ppm	mg/m ³	ppm	
	Xylene	655	150	350	80	
	Carbon black			3		
	Antimony, tris(dipentylcarbomodithioa to-S,S')-, (OC-6-11)-			0.5		Antimony and compounds (as Sb) Antimony and compounds (as Sb) compounds (a

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, antimony compounds and xylene are listed above and oil mist is listed below.

SUBSTANCE	TWA		STEL	
	ppm	mg/m ³	ppm	mg/m ³
Oil mist, mineral	-	5	-	10

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.

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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. Liquid content: Black liquid with a characteristic odour.
Odour	Aromatic odour.
Melting Point	Not applicable Liquid content may start to solidify at -26.1°C based on data for xylene.
Boiling Point	42°C
Solubility in Water	Insoluble
Specific Gravity (H₂O=1)	0.98 (liquid content)
pH Value	Not applicable
Vapour Pressure	Not available
Vapour Density (Air=1)	Not available 3.7 (xylene in liquid content)
Evaporation Rate	0.77 (xylene in liquid content)
Flash Point	-9.1°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.
Ignition Temperature	463.35°C to 528.95°C (Xylene)
Flammable Limits	Not available
LEL	
Flammable Limits	Not available
UEL	

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions.
Hazardous	Will not occur.
Polymerization	

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Materials to Avoid	Strong oxidising agents, acids and alkalies.
Hazardous Decomposition Products	Thermal decomposition may result in the release of toxic and/or irritating fumes including carbon monoxide, carbon dioxide, oxides of sulfur and some metallic oxides.
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. It is important to note that one of the ingredients, carbon black is classified as carcinogen category 2B according to the International Agency for Research on Cancer (IARC). Category 2B carcinogens are possibly carcinogenic to humans. Carbon black has yet to be classified as a carcinogen by the National Occupational Health and Safety Commission (NOHSC).
Inhalation	Harmful by inhalation. Inhalation of product vapours will cause irritation of the nose, throat and respiratory system. Symptoms may include intoxication, loss of control, central nervous system depression, 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	Harmful in contact with skin. Irritating to skin resulting in redness and itching.
Eye	Eye contact and high concentrations of solvent vapour may cause eye irritation, including redness, tearing, stinging and swelling.
Chronic Effects	Prolonged or repeated skin contact may cause defatting leading to dermatitis. Prolonged inhalation may cause central nervous system depression with symptoms including dizziness, drowsiness, nausea and headaches. Reports have associated repeated & prolonged occupational over-exposure to solvent with permanent brain and nervous system damage. Intentional misuse by deliberately inhaling contents can be fatal.

12. ECOLOGICAL INFORMATION

Environ. Protection	Prevent this material from entering the environment.
Mobility	Insoluble in water.
Persistence / Degradability	No data available for this specific product.
Bioaccumulation	No data available for this specific product.
Ecotoxicity	No data available for this specific product.

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: <ul style="list-style-type: none">- 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

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Packaging Method 5.9.2
EPG Number 2D1
IERG Number 49

15. REGULATORY INFORMATION

Risk Phrase R12 Extremely Flammable.
R20/21 Harmful by inhalation and in contact with skin.
R38 Irritating to skin.

Safety Phrase 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.

Poisons Schedule S6

Hazard Category Harmful, Irritant, Extremely Flammable

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

All reasonable care has been taken to ensure that the information and advice contained herein are accurate at the time of printing. However, Castrol accepts 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: October 2004

...End Of MSDS...