

Material Safety Data Sheet

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Infosafe No. CASM6 Issue Date : August 2005 ISSUED by CASTROL

Product Name : KOMATSU LITHIUM EP GREASE

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name KOMATSU LITHIUM EP GREASE
Company Name BP Australia Pty Ltd (ABN 53 004 085 616)
Address Melbourne Central, 360 Elizabeth Street Melbourne
Victoria 3001 Australia
Emergency Tel. +61 29032 0460 (or 1800 14 14 74 within Australia)
Telephone/Fax Number Tel: +61 (03) 9268 4111
Fax: +61 (03) 9268 3321
Recommended Use General purpose heavy equipment grease

2. HAZARDS IDENTIFICATION

Hazard Classification NON-HAZARDOUS SUBSTANCE.
NON-DANGEROUS GOODS.
Hazard classification according to the criteria of NOHSC.
Dangerous goods classification according to the Australia Dangerous Goods Code.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Information on Composition Contains lithium based petroleum distillates and additives.

Ingredients	Name	CAS	Proportion
	Ingredients determined not to be hazardous	Not required	100 %

4. FIRST AID MEASURES

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.
Medical advice must be obtained urgently if product under high pressure has been injected through the skin.
Note: High Pressure Applications Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. Injuries may not appear serious at first but within a few hours tissue becomes swollen, discoloured and extremely painful with extensive subcutaneous necrosis.
Surgical exploration should be undertaken without delay. Thorough and extensive debridement of the wound and underlying tissue is necessary to minimise tissue loss and prevent or limit permanent damage. Note that high pressure may force the product considerable distances along tissue planes.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media Water fog, carbon dioxide, foam or dry chemical.
Do NOT use water jets. Cool fire exposed containers with water spray.

Hazards from Combustion Products Under fire conditions this product may emit toxic and/or irritating fumes including oxides of carbon.

Specific Hazards Combustible substance. Fire-exposed container may rupture/explode.

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

Emergency Procedures	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

Precautions for Safe 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.
Conditions for Safe Storage	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 can be made to Australian Standard AS1940- The storage and handling of flammable and combustible liquids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards	No exposure standards have been established for this material by the National Occupational Health And Safety Commission (NOHSC).
Engineering 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.
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 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.
Other Information	No biological limit allocated.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Brown grease.
Odour	Mild petroleum
Melting Point	>200°C
Boiling Point	Not available.
Solubility in Water	Insoluble
Specific Gravity	0.90 @ 15°C

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Product Name : **KOMATSU LITHIUM EP GREASE**

pH Value	Not applicable
Vapour Pressure	Not available
Vapour Density (Air=1)	Not applicable
Viscosity	Not available
Flash Point	>150°C (Closed cup)
Flammability	Combustible substance. This product will burn if exposed to fire. Remove all sources of heat and ignition.
Auto-Ignition Temperature	Not available
Flammable Limits - Lower	Not available.
Flammable Limits - Upper	Not available.

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions.
Conditions to Avoid	Heat, direct sunlight, open flames or other sources of ignition.
Incompatible Materials	Strong oxidising agents.
Hazardous Decomposition Products	Thermal decomposition and combustion produce noxious fumes containing oxides of carbon.
Hazardous Polymerization	Will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicology Information	No toxicity data is available for this material.
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 excessive tearing.
Chronic Effects	Prolonged or repeated contact with this material may result in skin irritation possibly leading to dermatitis.

12. ECOLOGICAL INFORMATION

Ecological Information	No ecological data is available for this material.
Ecotoxicity	No data available for this specific product.
Persistence / Degradability	No data available for this specific product.
Mobility	No data available for this specific product.
Bioaccumulative Potential	No data available for this specific product.
Environ. Protection	Prevent this material from entering the environment.

13. DISPOSAL CONSIDERATIONS

Disposal Considerations	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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Product Name : **KOMATSU LITHIUM EP GREASE**

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

15. REGULATORY INFORMATION

Poisons Schedule	Not Scheduled
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16. OTHER INFORMATION

Date of preparation or last revision of MSDS	MSDS Creation: August 2005
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Contact Person/Point	All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.
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The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from us.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken.

...End Of MSDS...