



## Material Safety Data Sheet

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### 1. MATERIAL AND COMPANY IDENTIFICATION

**Material Name** : This Material Safety Data Sheet is applicable to the following KPRL greases:  
**KPRL 1 GREASE**  
**KPRL 3 GREASE**

**Other names** : MULTI-PURPOSE, LITHIUM SOAP BASED GREASE  
**Product Use** : Lubricating Grease  
**Company** : **Kenya Petroleum Refineries Ltd,**  
PO Box 90401 – 80100,  
Mombasa, KENYA.

**Emergency Telephone/Fax Numbers** : Tel: + 254 - 041- 3433511-19 / 2220967  
+254 - 0724 - 257103 ;+254 - 0733 -401640  
Fax: + 254 - 041- 2224251 / 3432603

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### 2. COMPOSITION / INFORMATION ON INGREDIENTS

A lubricating grease containing highly refined mineral oils and additives.  
Components of this preparation are not expected to impart hazardous properties to the product.

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### 3. HAZARDS IDENTIFICATION

**Appearance and Odor** : Smooth semi-solid grease, dark brown with hydrocarbon odour.

**Routes of Exposure** : Exposure will most likely occur through skin contact or from inhalation of mechanically or thermally generated oil mists.

**Health Hazards** : May be slightly irritating to the eyes.  
Product may be slightly irritating to skin.  
Inhalation of oil mists or vapours from hot oil may cause irritation of the upper respiratory tract.

**Safety Hazards** : Not classified as flammable but will burn.

**Other Information** : Not classified as dangerous for supply or conveyance.

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### 4. FIRST AID MEASURES

**Inhalation** : Remove affected person from contaminated area to fresh air. If not breathing, apply artificial respiration and seek urgent medical advice.

**Skin Contact** : Remove contaminated clothing. Wipe excess from skin. Wash contaminated skin with mild soap and water for 15 minutes.

**Eye Contact** : Flush eye with plenty of water for 20 minutes while holding eyelids open. If irritation occurs, seek medical advice.



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- Ingestion** : In the unlikely event of ingestion, obtain medical attention immediately. Do not induce vomiting. If vomiting occurs, keep head below hips to prevent aspiration
- Advise to Doctor** : Treat symptomatically
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### 5. FIRE FIGHTING MEASURES

- Extinguishing Media** : Use foam, water spray or fog, CO<sub>2</sub>, dry chemical powder.
- Fire fighting Instructions** : Caution, spilled material is slippery. Material will not burn unless pre-heated. Do not use a direct stream of water as it may spread fire. Use water to cool fire exposed containers. Water may be used to flush spills away from exposure. Do not enter confined fire space without adequate protective clothing and an approved positive pressure self-contained breathing apparatus.
- Hazardous Combustion Products** : CO, CO<sub>2</sub> and oxides of sulphur on combustion. Flame is extremely smoky.
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### 6. ACCIDENTAL RELEASE MEASURES

- Protective measures** : Spilled material is slippery. Isolate hazard area and restrict access. Wear appropriate breathing apparatus (if applicable) and protective clothing. Stop leak only if safe to do so. Contain a land spill by diking.
- Clean Up Methods** : Absorb residue or small spills with absorbent material and remove to non-leaking containers for disposal. For large spills, transfer by mechanical means and place in containers. Clean area with appropriate cleaner. Dispose of recovered material as noted under Disposal Considerations.
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### 7. HANDLING AND STORAGE

- Handling** : Avoid excessive heat, direct sunlight and strong oxidising agents. Avoid formation of oil mist, breathing of vapours and mist of hot oil, and prolonged or repeated contact with skin. Launder contaminated clothing prior to re-use. Use good personal hygiene.
- Storage** : Keep containers closed when not in use. Store in a cool, dry, well ventilated area, away from heat and ignition sources.
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**Material Safety Data Sheet****8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Occupational Exposure Limits (OELs)**

Material	Source	Type	ppm	mg/m3	Notation
Oil mist (mineral)	ACGIH	TWA		5	
Oil mist (mineral)	ACGIH	STEL		10	

- Exposure Controls** : Where oil mist is present or if exposure limit is exceeded, especially in enclosed area, local exhaust ventilation is recommended.
- Protective Clothing** : Oil impervious gloves (nitrile, neoprene or PVC) should be worn at all times when handling this product. Impervious clothing (apron, coveralls) should also be worn in confined work spaces or where the risk of skin exposure is high.
- Respiratory Protection** : Not normally required under intended conditions of use. If evaporation of oil component is occurring (i.e. under conditions of high heat), use a NIOSH approved chemical cartridge respirator with organic vapour cartridges in combination with a P95 particulate filter.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

- Appearance** : Smooth semi-solid grease, dark brown, with hydrocarbon odour.
- Flash point** : Not available
- Vapour pressure** : Not available
- Dropping Point** : 180 °C minimum
- Specific gravity (Water =1)** : Not available
- Water solubility** : Negligible.
- Boiling Point** : >316 °C
- Flammability limits** : 1% - 10% v/v (based on mineral oil)
- Auto ignition temperature** : Not available
- Vapour density (air =1)** : > 1 @ 15 °C

**10. STABILITY AND REACTIVITY**

- Stability** : Stable under normal conditions of use.
- Conditions to Avoid** : Extremes of temperatures and direct sunlight.
- Materials to Avoid** : Strong oxidizing agents.
- Hazardous Decomposition Products** : Hazardous decomposition products are not expected to form during normal storage. Thermal decomposition is highly dependant on conditions. A complex mixture of airborne solids,



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liquids and gases, including carbon monoxide, carbon dioxide and other organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation.

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### 11. TOXICOLOGICAL INFORMATION

- Routes of Exposure** : Exposure will most likely occur through skin contact or from inhalation of mechanically or thermally generated oil mists.
- Skin Irritation** : This product is not a primary skin irritant after exposure of short duration.
- Eye Irritation** : Not irritating to the eyes
- Sensitization** : Not a skin sensitiser
- Chronic Effects** : Prolonged and repeated contact with skin may cause defatting and drying of the skin resulting in skin irritation and dermatitis. Long term intensive exposure to oil mist may cause benign lung fibrosis.

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### 12. ECOLOGICAL INFORMATION

- Mobility** : Floats on water. If it comes into contact with soil, it will strongly adsorb to soil particles.
- Persistence/degradability** : Not readily biodegradable.
- Bioaccumulation** : Has potential to bioaccumulate.
- Ecotoxicity** : Product is expected to be practically non-toxic to aquatic organisms. May cause physical fouling of aquatic organisms.

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### 13. DISPOSAL CONSIDERATIONS

- Material Disposal** :  
1. Recycle (reprocess) if possible.  
2. Energy recovery (cement kilns, thermal power generation)  
3. Incineration  
4. Disposal at a licensed waste facility
- Local Legislation** : Disposal in Kenya should be in accordance with the *Environmental Management and Coordination (Waste Management) Regulations, 2006*.

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### 14. TRANSPORT INFORMATION

Not dangerous for conveyance under UN, IMO and IATA/ICAO codes.

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### 15. REGULATORY INFORMATION

Reference is made to the Kenyan *Factories & Other Place of Work (Hazardous Substances) Regulations, 2007*. Other regulations may apply to this material.



Kenya Petroleum Refinery Ltd

**KPRL GREASE 1**  
**KPRL GREASE 3**

MSDS No: KPRL/MSDS/ KPRL1/12;  
Date Issued: 31<sup>st</sup> October, 2007

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**16. OTHER INFORMATION**

- MSDS Revisions** : None.
- MSDS Regulation** : The contents in the MSDS are in fulfillment of the requirements of the *Factories & Other Place of Work (Hazardous Substances) Regulations, 2007*.
- Disclaimer:** : The information contained herein is based on our current knowledge of the underlying data and is intended to describe the product for the purpose of health, safety and environmental requirements only. No warranty or guarantee is expressed or implied regarding the accuracy of these data or the results to be obtained from the use of the product.