



SAFETY DATA SHEET

Product Name **HARDROCK DRG 3**

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Supplier name HARDROCK GREASE CO PTY LTD
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Web site <http://www.hardrockgrease.com.au/>
Synonym(s) DRG 3 • PG-9011
Use(s) EARTH MOVING • HEAVY PLANT • INDUSTRIAL GREASE
SDS date 21 February 2014

2. HAZARDS IDENTIFICATION

NOT CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

RISK PHRASES

None allocated

SAFETY PHRASES

None allocated

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

UN number	None Allocated	DG class	None Allocated
Packing group	None Allocated	Subsidiary risk(s)	None Allocated
Hazchem code	None Allocated		

3. COMPOSITION/ INFORMATION ON INGREDIENTS

Ingredient	Identification	Classification	Content
PETROLEUM RESIDUAL OILS - SOLVENT DEWAXED	CAS: 64742-62-7 EC: 265-166-0	Carc.;R45	20 to 50%
LITHIUM HYDROXIDE MONOHYDRATE	CAS: 1310-66-3 EC: 215-183-4	Not Available	<10%
BUTENE, HOMOPOLYMER (PRODUCTS DERIVED FROM EITHER/OR BUT-1-ENE/BUT-2-ENE)	CAS: 9003-29-6 EC: 500-004-7	Not Available	10 to 30%
DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC	CAS: 64742-65-0 EC: 265-169-7	Not Available	10 to 30%
DISTILLATES (PETROLEUM), SOLVENT-DEWAXED LIGHT NAPHTHENIC (< 3 % DMSO EXTRACT)	CAS: 64742-64-9 EC: 265-168-1	Not Available	10 to 30%
12-HYDROXY STEARIC ACID	CAS: 106-14-9 EC: 203-366-1	Not Available	<10%
2-IMIDAZOLINE-1-ETHANOL, 2-(8-HEPTADECENYL)	CAS: 95-38-5 EC: 202-414-9	Not Available	<10%
ALKYL MERCAPTOTHIAADIOZOLES	Not Available	Not Available	<10%

SULPHUR & PHOSPHOROUS COMPOUNDS	Not Available	Not Available	<10%
SYNTHETIC OXIDATION INHIBITOR	CAS: 68921-45-9 EC: 272-940-1	Not Available	<10%

4. FIRST AID MEASURES

Eye	If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.
Inhalation	If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.
Skin	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.
Ingestion	For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting.
Advice to doctor	Treat symptomatically.

5. FIRE FIGHTING MEASURES

Flammability	Combustible. May evolve carbon oxides and hydrocarbons when heated to decomposition.
Fire and explosion	Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.
Extinguishing	Dry agent, carbon dioxide or foam. Prevent contamination of drains or waterways.
Hazchem code	None Allocated

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear Personal Protective Equipment (PPE) as detailed in Section 8 of this SDS. Clear area of all unprotected personnel. Ventilate area where possible.
Environmental precautions	Prevent product from entering drains and waterways.
Methods of cleaning up	Contain spillage, then cover/absorb spill with non-combustible absorbent material (vermiculite, sand, or similar), collect and place in suitable containers for disposal.
References	See Sections 8 and 13 for exposure controls and disposal.

7. STORAGE AND HANDLING

Storage	Store in a cool, dry, well ventilated area, removed from incompatible substances, heat or ignition sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for leaks or spills. Large storage areas should have appropriate fire protection systems. Store as a Class C2 Combustible Liquid (AS1940).
Handling	Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure standards

Ingredient	Reference	TWA		STEL	
		ppm	mg/m ³	ppm	mg/m ³
Mineral Oil Mist	SWA (AUS)	--	5	--	--
Mineral Oil Mist	SWA (AUS)	--	5	--	--
Mineral Oil Mist	SWA (AUS)	--	5	--	--

Biological limits No biological limit allocated.

Engineering controls Avoid inhalation. Use in well ventilated areas. Maintain vapour levels below the recommended exposure standard.

PPE

Eye / Face Wear splash-proof goggles.

Hands Wear PVC or rubber gloves. With prolonged use, wear viton (R) or nitrile gloves.

Body When using large quantities or where heavy contamination is likely, wear coveralls.

Respiratory Where an inhalation risk exists, wear a Type A (Organic vapour) respirator.



9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	DARK BROWN GREASE
Odour	SLIGHT CHARACTERISTIC ODOUR
Flammability	CLASS C2 COMBUSTIBLE
Flash point	> 200°C
Boiling point	NOT AVAILABLE
Melting point	NOT AVAILABLE
Evaporation rate	NOT AVAILABLE
pH	NOT AVAILABLE
Vapour density	NOT AVAILABLE
Specific gravity	NOT AVAILABLE
Solubility (water)	INSOLUBLE
Vapour pressure	NOT AVAILABLE
Upper explosion limit	NOT AVAILABLE
Lower explosion limit	NOT AVAILABLE
Partition coefficient	NOT AVAILABLE
Autoignition temperature	NOT AVAILABLE
Decomposition temperature	NOT AVAILABLE
Viscosity	NOT AVAILABLE
Explosive properties	NOT AVAILABLE
Oxidising properties	NOT AVAILABLE
% Volatiles	NOT AVAILABLE

10. STABILITY AND REACTIVITY

Chemical stability	Stable under recommended conditions of storage.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources.
Material to avoid	Incompatible with oxidising agents (eg. hypochlorites), acids (eg. nitric acid), alkalis (eg. sodium hydroxide), heat and ignition sources.
Hazardous Decomposition Products	May evolve carbon oxides and hydrocarbons when heated to decomposition.
Hazardous Reactions	Polymerization is not expected to occur.

11. TOXICOLOGICAL INFORMATION

Health Hazard Summary	Low toxicity. Use safe work practices to avoid eye or skin contact and inhalation. The mineral oil contained within this product is highly refined and therefore is not classifiable as to its carcinogenicity in humans (IARC Group 3).
Eye	Low to moderate irritant. Contact may result in irritation, lacrimation, pain and redness.
Inhalation	Low to moderate irritant. Due to product form / nature of use, an inhalation hazard is not anticipated with normal use. However, if product is heated or mists generated, exposure may result in respiratory irritation, headache and nausea.
Skin	Low irritant. Prolonged or repeated contact may result in mild irritation, rash and dermatitis.
Ingestion	Low toxicity. Ingestion of large quantities may result in nausea, vomiting, abdominal pain, diarrhoea,

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and drowsiness. Aspiration may result in chemical pneumonitis and pulmonary oedema.

LITHIUM HYDROXIDE MONOHYDRATE (1310-66-3)
LD50 (ingestion) 368 mg/kg (rat)

BUTENE, HOMOPOLYMER (PRODUCTS DERIVED FROM EITHER/OR BUT-1-ENE/BUT-2-ENE)
(9003-29-6)
TCLo (inhalation) 700 mg/m³/7 hour/2 week-intermittent (rat)

12-HYDROXY STEARIC ACID (106-14-9)
TDLo (subcutaneous) 160 mg/kg/40 weeks intermittently (mouse)

12. ECOLOGICAL INFORMATION

Toxicity No information provided.

Persistence and degradability No information provided.

Bioaccumulative potential No information provided.

Mobility in soil No information provided.

Other adverse effects No information provided.

13. DISPOSAL CONSIDERATIONS

Waste disposal For large volumes, mix with flammable solvent and incinerate at approved facility. May be recycled. Avoid contamination of drains or waterways. Contact the manufacturer for additional information.

Legislation Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
UN number	None Allocated	None Allocated	None Allocated
Proper shipping name	None Allocated	None Allocated	None Allocated
DG class/ Division	None Allocated	None Allocated	None Allocated
Subsidiary risk(s)	None Allocated	None Allocated	None Allocated
Packing group	None Allocated	None Allocated	None Allocated
Hazchem code	None Allocated		

15. REGULATORY INFORMATION

Poison schedule A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Inventory Listing(s) **AUSTRALIA: AICS (Australian Inventory of Chemical Substances)**
All components are listed on AICS, or are exempt.

16. OTHER INFORMATION

Additional information MINERAL OILS - SOLVENT REFINED: Animal experiments and human experience have not shown cancer risks when handling solvent refined mineral oils, unlike non refined mineral oils. CLEANING MINERAL OIL CONTAMINATED CLOTHING: Cleaners are advised that when cleaning oil contaminated clothing it is essential that freshly distilled solvent is used for each batch, including final rinse, as even filtered solvent will leave oil residues.

MINERAL OILS - INJECTION: Where high pressure applications are used the risk of accidental injection under the skin exists and may result in an extremely painful and serious injury requiring immediate medical attention. Depending on the pressure used, mineral oils may be injected a considerable distance below the skin and may cause permanent tissue damage. **SEEK IMMEDIATE MEDICAL ATTENTION. EXERCISE EXTREME CARE WHEN USING HIGH PRESSURE EQUIPMENT.**

RESPIRATORS: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:
The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

HEALTH EFFECTS FROM EXPOSURE:
It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a ChemAlert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS #	Chemical Abstract Service number - used to uniquely identify chemical compounds
CNS	Central Nervous System
EC No.	EC No - European Community Number
GHS	Globally Harmonized System
IARC	International Agency for Research on Cancer
LC50	Lethal Concentration, 50% / Median Lethal Concentration
LD50	Lethal Dose, 50% / Median Lethal Dose
mg/m ³	Milligrams per Cubic Metre
OEL	Occupational Exposure Limit
PEL	Permissible Exposure Limit
pH	relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
ppm	Parts Per Million
REACH	Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals
STEL	Short-Term Exposure Limit
STOT-RE	Specific target organ toxicity (repeated exposure)
STOT-SE	Specific target organ toxicity (single exposure)
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
SWA	Safe Work Australia
TLV	Threshold Limit Value
TWA	Time Weighted Average

Revision history

Revision	Description
1.1	Standard SDS Review
1.0	Initial SDS creation

Report status

This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier.

While RMT has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

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End of SDS