Tel: (08) 9452 4322 Product: HAMMERHEAD GREASE Issue Date: 1st August 2017 Revision: 2.0



SAFETY DATA SHEET

STATEMENT OF HAZARDOUS NATURE

This product is classified as not hazardous.

COMPANY DETAILS

SUPPLIER NAME: Golden West Lubricants

ADDRESS: 30 Wildfire Rd

Maddington WA6109

Tel: (08) 9452 3422

COMPANY: Products Development Manufacturing Co., Ltd

ADDRESS: 774 Rama III Road, Bangpongpang Yannawa, Bangkok, 10120.

TELEPHONE NUMBER: (02) 294-5086/9

EMERGENCY TELEPHONE NUMBER: (02) 294-5086/9 Ext 105 (Technical Dept)

IDENTIFICATION

PRODUCT NAME: HAMMERHEAD GREASE

OTHER NAMES:

MANUFACTURER'S PRODUCT CODE:

UN NUMBER:

HAZCHEM CODE:

Not applicable.

Not applicable.

DANGEROUS GOODS

CLASS/SUBSIDIARY RISK: Not applicable. POISONS SCHEDULE NUMBER: Not applicable.

USECopper and graphite based lubricant designed to minimize seizing of

equipment.

PHYSICAL DESCRIPTION/PROPERTIES

APPEARANCE: Smooth dark bronze coloured grease.

VAPOUR PRESSURE(Pa or mmHg at 20°C): Not available.

DENSITY @ 15°C (g/mL): Typically 0.95.

FLASHPOINT(°C): >200°C(ASTM D-93).

FLAMMABILITY LIMITS(%): Not available.

SOLUBILITY IN WATER(g/L): Not miscible with water.

OTHER PROPERTIES

 $\begin{array}{lll} \mbox{DROP POINT (0C):} & > 260 \ ^0\mbox{C.} \\ \mbox{VISCOSITY @ 100 0C(cSt):} & \mbox{Not available.} \\ \mbox{PENETRATION, UNWORKED:} & \mbox{Typically 280.} \end{array}$

IDENTIFICATION continued

INGREDIENTS

CHEMICAL ENTITY:	CAS No.	PROPORTION
Residual Oils(Petroleum), Solvent Dewaxed	64742-62-7	> 60%
Graphite	7782-42-5	< 10%
Copper	7440-50-8	< 10%
Molbdenum Disulphide	1317-33-5	< 10%
Organic Modified Clay(Organophilic Clay)	68953-58-2	< 10%
1,2,3-Propanetriol(Glycerol Anhydrous)	56-81-5	< 10%
Zinc Diamyldithiocarbamate	15337-18-5	< 10%
Tri-Sodium Phosphate Anhydrous	7601-54-9	< 10%
Mixture of Polyolefin Additive in Highly Refined Mineral Oil	-	< 10%

HEALTH HAZARD INFORMATION

HEALTH EFFECTS

ACUTE SWALLOWED: This is not expected to be a means of entry during routine operation.

Ingestion of small quantities should not cause irritation.

EYE: May cause slight irritation to the eyes.

SKIN: May be mildly irritating to the skin. High pressure injection

through the skin, when using apparatus such as grease guns, can be

highly irriating and may cause localised damage.

INHALED: No data to indicate a toxic inhalation hazard. Inhalation of vapours,

fumes or mist (generated at elevated temperatures) may cause

irritation to the nose and throat.

CHRONIC: Prolonged or repeated skin contact may lead to drying of the skin.

FIRST AID SWALLOWED: If a large quantity is ingested seek medical attention. It may be

necessary to induce vomiting, taking extreme care that the person does not aspirate into the lungs. If aspiration occurs, urgent medical

attention should be sought.

EYE: Wash with copious amounts of water for 15 minutes and seek

medical advice if irritation develops or persists.

SKIN: Remove contaminated clothing and wash skin thoroughly with

plenty of soap and water. High pressure injection through the skin requires urgent medical attention for possible incision, irrigation and/or debridement. Contact with molten material will require treatment by a physician for burns (Do not remove material).

INHALED: Remove person to fresh air and seek medical advice. If not

breathing, apply artificial respiration and seek urgent medical aid.

FIRST AID FACILITIES: Eye wash fountains and safety showers are recommended.

ADVICE TO DOCTOR: Treat symptomatically.

PRECAUTIONS FOR USE

EXPOSURE STANDARDS: If the material is subjected to high temperature operations and mists,

fumes or vapours are generated the Manufacturer recommends:

Time Weighted Average (TWA): 5 mg/m³ (oil mist). Short Term Exposure Limit (STEL): 10 mg/m³ (oil mist). Time Weighted Average (TWA): 0.2 mg/m³ (Copper fume).

ENGINEERING CONTROLS: Special ventilation is not normally required. However, in the

operation of certain equipment or at elevated temperatures mists, dusts, fume or vapour may be generated and localised exhaust ventilation should be provided to maintain airborne concentration levels below the manufacturer recommended exposure standard.

PERSONAL PROTECTION

RESPIRATOR TYPE (AS1716): During routine operation a respirator is not required. However, if

mists, dusts, fumes or vapours are generated, an approved organic

vapour/particulate respirator is required.

GLOVE TYPE: PVC, Neoprene or Nitrile gloves are recommended.

EYE PROTECTION: Safety glasses or goggles are recommended to avoid eve contact. If

the material is used at elevated temperatures or under pressure a full

face shield should be worn.

CLOTHING: During normal operating procedures, long sleeved clothing is

recommended to provide skin protection. Soiled clothing should be

washed with detergent prior to re-use.

FLAMMABILITY

FIRE HAZARDS: Not flammable under conditions of use. Is a combustible solid that

will burn if preheated.

SOURCES OF IGNITION ADVICE: Not applicable. HAZCHEM CODE: Not applicable.

SAFE HANDLING INFORMATION

STORAGE AND TRANSPORT: Classified as a combustible solid. Store in a well ventilated area

away from ignition sources, oxidising agents, foodstuffs and clothing. Keep containers closed when not in use. Do not store in

plastic containers unless approved for this application.

SPILLS AND DISPOSAL: Spills are easily contained due to the nature of the product. Caution:

The product may be slippery. The product should be shovelled into a metal drum and treated as a solid waste. Follow state or local regulations for the disposal of the waste. Clean area with soap and water. Do not allow product to enter drains, sewers or water courses

- inform local authorities if this occurs.

SAFE HANDLING INFORMATION continued

FIRE/EXPLOSION HAZARD

HAZARDS OF USE/STORAGE: This product is combustible if preheated.

LIST OF DANGEROUS DECOMPOSITION

OR COMBUSTION PRODUCTS: Combustion produces oxides of carbon, copper and nitrogen.
FIRE-FIGHTING RECOMMENDATIONS: Keep storage tanks, pipelines, containers, fire exposed surfaces, etc.

cool with water spray.

TYPES OF EXTINGUISHER/

FIRE-FIGHTING AGENTS: Use foam, carbon dioxide or dry chemical.

PRECAUTION: Water may cause splattering.

PROTECTIVE CLOTHING: Self-contained breathing apparatus is recommended during a fire.

REACTIVITY: May react with strong oxidising agents.

OTHER INFORMATION

TOXICOLOGICAL DATA:

ORAL TOXICITY(RATS): Based upon testing of similar products and/or components, this material is considered to be relatively non-toxic with a LD50: > 2000 mg/Kg.

DERMAL TOXICITY(RABBITS): Based upon testing of similar products and/or components, this material is considered to be relatively non-toxic with a LD50: > 2000 mg/Kg.

EYE IRRITATION(RABBITS): Based upon testing of similar products and/or components, this material is considered to be relatively non-irritating.

SKIN IRRITATION(RABBITS): Based upon testing of similar products and/or components, this material is considered to be relatively non-irritating.

SUBCHRONIC TOXICITY(RATS): Based upon testing of similar products and/or components, this material is considered to show no adverse effects by dermal application to rats.

REPRODUCTIVE TOXICITY(RATS): Based upon testing of similar products and/or components, this material is considered to show no adverse effects in either the mothers or their offspring by dermal exposure of pregnant rats. CHRONIC TOXICITY(MICE): Based upon testing of similar products and/or components, this material is considered to show no evidence of carcinogenic effects by chronic mouse skin painting studies.

SENSITISATION(GUINEA PIGS): Based upon testing of similar products and/or components, this material is considered to show no evidence of skin sensitisation to guinea pigs during studies.

ECOTOXICOLOGY DATA:

This product contains copper. Although this element is naturally present in the environment, high environmental concentrations of copper may have an effect on aquatic organisms. The manufacturer nominates an $EC50 = 0.2 \text{ mg/dm}^3$

CONTACT POINT

TITLE: Technical Department Supervisor TELEPHONE NUMBER: (02) 294-5086/9 Ext 105

All information contained in this Material Safety Data Sheet and the health, safety and environmental information are considered to be accurate to the best of our knowledge as of the issue date specified above. However, no warranty or representation, expressed or implied, is made as to the accuracy or completeness of the data and information contained in this data sheet.

Health and safety precautions and environmental advice noted in this data sheet may not be accurate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The Company accepts no responsibility for any injury, loss or damage, resulting from abnormal use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material.