

A New Lubricity Dimension Evolved From Experience



ZetaLube 204 Heavy Duty Roller Bearing Grease



ZetaLube 204 is an advanced heavy duty grease suitable particularly for application on all types of roller bearings. To cope with the high load and to provide strong film strength to the roller bearings, ZetaLube 204 is formulated with synthetic base fluid and special additive package. In addition, it is fortified with special solid lubricants to provide extra-protection to bearing parts against wear and high loads & pressure that are potentially deteriorating to the normal performance of machinery/equipment.

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Features and Benefits

- Excellent load-carrying capacity provided by synthetic base fluid and EP additive to protect machinery/equipment against high loads, high pressure and shock loads.
- Outstanding resistance to corrosion and oxidation.
- Good protection against water wash-off.
- Exceptional film strength and stiffness needed to protect parts against heavy loading and severe impact.
- High level of thermal and shear stabilities.
- Maintains adequate lubricity at high temperatures.
- Prevents excessive bearing bleeding and extends service life of bearing parts.

Recommended Applications

- For roller bearings including taper roller bearings and roller thrust bearings of heavy-duty industrial machineries and equipment exposed to medium to high speeds.
- For rotating contacts subjected to sliding movement under heavy loads.
- Can also be used for lubrication of ring frames in the textile industry.

Typical Data

	ASTM TEST METHOD	TEST RESULT
Appearance	Visual	Smooth & Tacky
NLGI Grade		#2
Worked Penetration @ 25°C	D-217	265-295
Base Fluid:		
Viscosity, cSt @ 40°C	D-445	165
Viscosity, cSt @ 100°C	D-445	19
Timken, OK Load, kg	D-2509	36
4-Ball EP Performance:		
Weld Load, kg	D-2596	500
Operating Temperature Range, °C		-40 to +210

The data shown are typical value and may vary.

Pack-size 15 Kg Pail & 1 Kg Jar

Authorized Distributor

Alshawi Trading, Block 351, Road 51, Bldg 20, Manama - Bahrain. www.alshawitrading.com info@alshawitrading.com P.O. Box: 33526

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The information contained in this publication is to the best of our knowledge and were believed to be accurate at the time of issue.

The recommendations or suggestions contained in it are made without guarantee or representation as to results and are applied to ZetaLube products only.

MATERIAL SAFETY DATA SHEET

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910. 1200, Standard must be consulted for specific requirements. ZETALUBE DIVISION MAGNA INDUSTRIAL CO. LIMITED 18/F., GUARDIAN HOUSE, 32 OI KWAN ROAD, WANCHAI, HONG KONG

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IDENTITY (As Used on Label and List)	LAST ASSESSED: 29 May 2007
ZETALUBE 204	

SECTION I - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Hazardous Components (Specific Chemical Identity: Common Name(s))	CAS NO.	ACGIH TLV	Other Limits Recommended
Highly refined mineral oil**	64742-65-0	5mg/m ³ *	_
Polyalphaolefin	68037-01-4	5mg/m ³ *	_
Polytetrafluoroethylene, PTFE	9002-84-0	-	* * *

SECTION II - PHYSICAL CHARACTERISTICS

Boiling Point	N.A.	Specific Gravity $(H_2 0 = 1)$	~0.9
Vapor Pressure (N.A.)	N.A.	Melting Point	>250°C
Vapor Density (AIR = 1)	N.A.	Evaporation Rate (Ether = 1)	N.A.

Solubility in Water <0.1 g/l

Appearance and Odor Light yellow paste with negligible odor.

SECTION III - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Flammable Limits	LEL	UEL
>240°C	N.A.	-	-

Extinguishing Media

Dry chemical, water fog, carbon dioxide, foam, and sand.

Special Fire Fighting Procedures

Fire fighters should wear an approved self-contained breathing apparatus.

Unusual Fire and Explosion Hazards

None expected. Decomposition is initiated above 300°C.

SECTION IV - REACTIVITY DATA

Stability	Conditions to Avoid
Stable	Pyrolysis

Incompatibility (Materials to Avoid)

Strong oxidizing agents

Hazardous Decomposition or Products

Oxides of carbon

Hazardous Polymerization	Condition to Avoid
Will Not Occur	None

SECTION V - HEALTH HAZARD DATA

Threshold Limit Value

See section I hazardous ingredients

Effects of Overexposure

There is no lethal dose information available.

Inhalation: Inhalation of vapours can cause irritation of the respiratory
tract. High concentrations of oils, mists or vapours can cause chemical
pneumonitis. Inhalation of vapors from material at high temperature (over
250°C) must be avoided.
Skin: May cause irritation, drying and cracking.
Eyes: Cause irritation.
Ingestion: May cause irritation in mouth and stomach, thirst, nausea,
vomiting, diarrhoea, with possible collapse if large amounts ingested.
Aspiration of material upon vomiting may cause chemical pneumonitis.

Emergency & First Aid Procedures

Eyes: Flush with large amounts of water for at least 15 min. Call a physician immediately. Skin contact: Wash thoroughly with soap and water. Inhalation: N.A. If swallowed: Call a physician immediately.

SECTION VI - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to Be Taken In Case Material Is Released or Spilt

Transfer bulk of material into another container. Absorb remaining residue with proper absorbents such as sand, earth, and vermiculite. Sweep up and dispose of as solid waste comply with all local and national regulations.

Waste Disposal Method

By methods consistent with local and national regulations.

Precautions to Be Taken in Handling and Storing

Keep containers closed. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Wash clothing before re-use. Keep away from feed and food products. Avoid contamination of cigarettes or other tobacco products.

Other Precautions

Keep out of the reach of children.

SECTION VII - CONTROL MEASURES

Respiratory Protection (Specify Type)

None required unless mists, smokes or vapors are produced at high temperatures.

Ventilation	N.A.		Special
			N.A.
			Other
N.A.			N.A.
Protective Gloves		Eve Protecti	nc

Protective Groves	Lye Protection
Rubber or plastic oil resistant gloves.	Safety goggles and full-face shield when handled hot.

Other Protective Clothing or Equipment

None required

Work/Hygienic Practices

N.A.

Remarks

* The ACGIH TLV for mineral oil mists is 5mg/m³ for a daily 8-hour exposure. ** Contains less than 3% DMSO extract as measured by IP346. *** Not a hazardous material under normal usage, but PTFE can produce toxic fumes if pyrolized. Decomposition is initiated above 300°C, when thermally decomposed, may cause polymer fume fever and flu-like symptoms.

Transportation: Not classified.

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