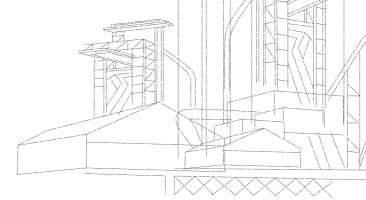


# ZetaLube 201 Heavy Duty EP Grease

# Description

ZetaLube 201 is mineral oil based, heavy duty grease suitable for application on parts/components of machinery/equipment exposed to high loads. Thickened by Lithium Complex soap and formulated with carefully selected additives, it provides excellent protection against water wash-off, extreme loads/pressure, and wears that cause premature breakdown and costly downtime.



MAGNA INDUSTRIAL CO. LIMITED

Total Quality Maintenance





# Features and Benefits

- Excellent load-carrying capacity provided by viscous base fluid and special EP additive to protect machinery/equipment against high loads, high pressure and shock loads.
- Strong resistance to corrosion and oxidation.
- Outstanding protection against water wash-off extra protection to machinery/equipment against rust and corrosion caused by moisture.
- Unparalleled film strength and stiffness needed to protect parts against heavy loading and severe impact.
- High level of chemical and thermal resistance for machinery/equipment exposed to harsh operating conditions in heavy industries such as steel and paper & pulp mills.
- Versatile heavy duty applications for maintenance professionals to reduce inventory level.
- Extends service life of machinery/equipment and reduces maintenance costs.

# Recommended Applications

- Lubrication of heavy-duty industrial machineries and equipment.
- Lubrication of bearing parts exposed to high temperature and extra-load conditions in water-intensive operating industrial processes, e.g. steel mills, paper / pulp / board mills.
- Commercial automotive bearing parts exposed to frequent water washout and marine equipment.

# Typical Data

TEST	ASTM TEST METHOD	TEST RESULT
Color		Green
NLGI Grade		#2
Worked Penetration @ 25°C	D-217	265-290
Mineral Base Oil:		
Viscosity, cSt @ 40°C	D-445	455
Viscosity, cSt @ 100°C	D-445	30
Viscosity Index	D-2270	110
Flash Point, °C	D-92	254
Pour Point, °C	D-97	-10
Dropping Point, °C	D-2265	260
Timken, OK Load, kg	D-2509	23
4-Ball EP Performance:		
Weld Load, kgf	D-2596	320
Water Washout Characteristics:		
Grease Washout, %	D-1264	4.5
Oil Separation, %	D-1742	2
Oxidation Resistance:		
Pressure Drop, 100 Hours, kpa	D-942	25
Texture		Smooth & Tacky
Operating Temperature Range, °C		-7 to +190

The data shown are typical value and may vary.

# Pack-size

15 Kg Pail

Authorized Distributor

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

Tel: (973) 1755 0019 Fax: (973) 1755 5108

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

TEL: (852) 2577 5187 FAX: (852) 2577 3190

IDENTITY (As Used on La	abel and List)	LAST	ASSESSED:	29	May	2007
ZETALUBE 2	201					

ZEIALOBE ZUI						
SECTION I - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION						
Hazardous Components (Specific Chemical Identity: Common Name(s))		CAS NO.	ACGIH CAS NO. TLV		Other Limits Recommended	
Highly refined mineral oil**		64742-65-0	5.0	$mg/m^3*$	_	
Highly refined mineral oil**		64741-62-7	5.0	$mg/m^3*$	_	
SECTION II - PHYSICAL CHARACTERISTICS						
Boiling Point	N.A.	Specific Gravity $(H_20 = 1)$		~0.90		
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 $< 0.1 \text{ g/l}$						
Appearance and Odor Tacky green grease 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. Autoignition temperature is in excess of 450°C.						
SECTION IV - REACTIVITY DATA						

Stability	Conditions to Avoid
Stable	None

## Incompatibility (Materials to Avoid)

Strong oxidizing agents

# Hazardous Decomposition or Products

Oxides of carbon

Hazardous Polymerization Will Not Occur	Condition to Avoid 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.

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.

#### Other Precautions

Keep out of the reach of children.

#### SECTION VII - CONTROL MEASURES

## Respiratory Protection (Specify Type)

None required

Ventilation	Local Exhaust	Special
	N.A.	N.A.
	Mechanical (General)	Other
	N.A.	N.A.

#### Protective Gloves

Rubber or plastic oil resistant gloves.

#### Eye Protection

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  $5mg/m^3$  for a daily 8-hour exposure.
- \*\* Contains less than 3% DMSO extract as measured by IP346.

Transportation: Not classified.

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind, express or implied, and we assume no responsibility or any loss, damage, or expense, direct or consequential, arising out of their use.