



ZetaLube

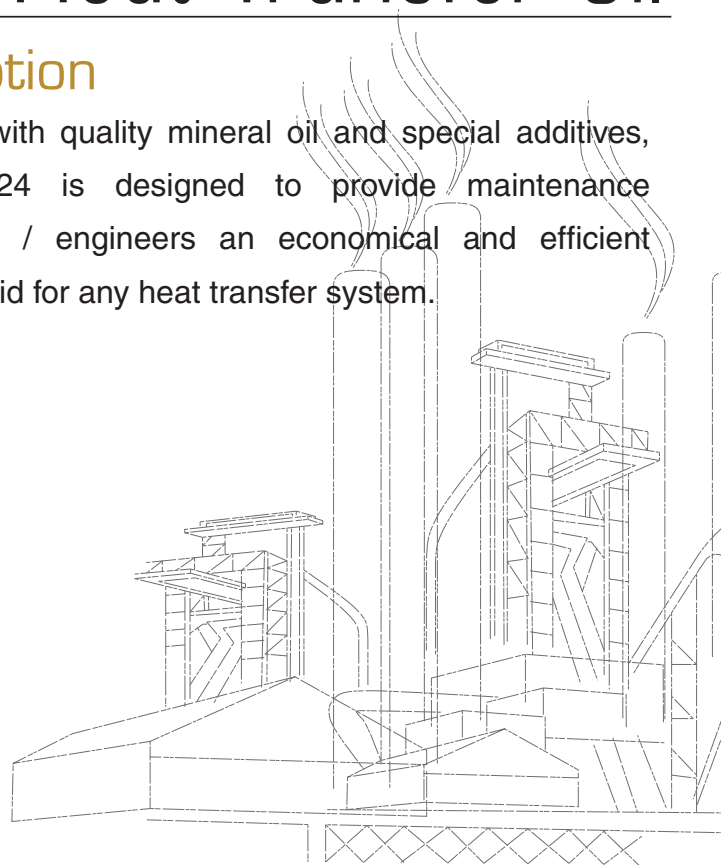
A New Lubricity Dimension
Evolved From Experience



ZetaLube 224 Heat Transfer Oil

Description

Formulated with quality mineral oil and special additives, ZetaLube 224 is designed to provide maintenance professionals / engineers an economical and efficient circulating fluid for any heat transfer system.



MAGNA INDUSTRIAL CO. LIMITED
Total Quality Maintenance

www.magnagroup.com

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Features and Benefits

- Offers good fluidity so as to minimize the energy and costs required to pump and circulate the oils.
- Formidable thermal conductivity to optimize the efficiency and to minimize the costs of the heat transfer system.
- Excellent thermal stability – minimizes the fluctuation of temperatures and eliminates the formation of sludge and deposits in the heat transfer system.
- Low volatility helps eliminate vapor lock in circulating pumps and reduces the possibility of pump cavitations.
- Provides uniform rate of heat transfer - reduces the risk of overheating in any particular spot of the system.

Recommended Applications

- For enclosed heat transfer system in the production processes of :
 - Asphalt and coal tar
 - Chemicals and pharmaceuticals manufacturing
 - Fiberboards
 - Greases
 - Plywood laminating
 - Rubber and plastics
 - Sheet metal laminating
 - Soaps
 - Textiles
 - Varnish and resins manufacturers
 - And many more

Typical Data

TEST	ISO VG 32
Appearance	Light Amber
Density, kg/L @ 20°C	0.864
Viscosity, cSt @ 40°C	32
Flash Point (Open Cup) °C	>210
Pour Point, °C	-9
Copper Strip Test	1a

The data shown are typical value and may vary.

Pack-size

205 Litre Metal Drum & 20 Litre Plastic Container

Authorized Distributor

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

Tel: (973) 1755 0019
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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.

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IDENTITY (As Used on Label and List) ZETALUBE 224	LAST ASSESSED: 29 May 2007
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SECTION I - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

<i>Hazardous Components (Specific Chemical Identity: Common Name(s))</i>	<i>CAS NO.</i>	<i>ACGIH TLV</i>	<i>Other Limits Recommended</i>
Highly refined mineral oil	64742-65-0	5mg/m ³ *	-

SECTION II - PHYSICAL CHARACTERISTICS

<i>Boiling Point</i>	N.A.	<i>Specific Gravity (H₂O = 1)</i>	~0.9
<i>Vapor Pressure (@25°C, mmHg)</i>	N.A.	<i>Melting Point</i>	N.A.
<i>Vapor Density (AIR = 1)</i>	N.A.	<i>Evaporation Rate (Ether = 1)</i>	N.A.

Solubility in Water Negligible

Appearance and Odor Light amber liquid with negligible odor

SECTION III - FIRE AND EXPLOSION HAZARD DATA

<i>Flash Point (Method Used)</i>	<i>Flammable Limits</i>	<i>LEL</i>	<i>UEL</i>
>210°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

<i>Stability</i>	<i>Conditions to Avoid</i>
Stable	None

Incompatibility (Materials to Avoid)

Strong oxidizing agents, hydrogen peroxide, chromic acid, bromine.

Hazardous Decomposition or Products

Incomplete combustion and high temperature thermal decomposition may promote oxides of carbon, sulfur and phosphorus.

<i>Hazardous Polymerization</i>	<i>Condition to Avoid</i>
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.

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	Eye 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.

Transportation: Not classified.

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