Ωmega 73

NOTE:

The criterion of a good gear lubricant is based on its ability to separate the loading from one pair of gears to another in a multiple gear set. All frictional surfaces within any one gear system - including the gear shaft bearings - are lubricated from one common source. If severe wear and its resulting downtime are to be avoided, no lubricant compromise can be made.

Omega 73 is a specially developed waterproof open gear lubricant, designed to provide multiple protection to most open gear systems - without compromise!

DESCRIPTION:

Omega 73 is a special, weather and water resistant open gear lubricant that clings tenaciously in position regardless of wind, rain, sleet, snow, sun, dust storms and other climatic phenomena. It provides the additional protection needed for gears and gear systems that ordinary gear greases fail to provide. Ordinary greases rapidly develop into collective deposits that harden and cause frictional-drag and excessive energy consumption. Omega 73 remains in position and keeps the system and the gears in silent mesh.



CAPILLARY ACTION:

Omega 73 has a capillary action that spreads over metal surfaces and into wear areas. This action prevents or reduces: -

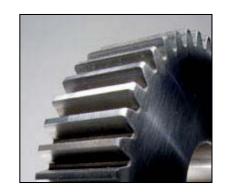
wiping scuffing galling rippling sliding pitting scoring clawing

These wear aspects are common with the use of ordinary greases.

HYDRODYNAMIC STABILITY:

Omega 73 provides a hydrodynamic "liquid wedge" between gear wear areas. This 'bed' of highly micronized bearings provides minimum friction for intermeshing teeth and shafts / pinions.

Ordinary lubricant deposits build up and rapidly develop into hard spots that score, gel, gall or claw metal surfaces.



EXTREME-PRESSURE & CORROSION RESISTANCE:

Omega 73 is loaded with special heavy-duty Extreme Pressure (EP) and anticorrosion supplements. These resist:-

Shock Loading Pressure

Meshing Brake seizure Ratio alterations

Squeeze-out Start-up pressure Corrosion

SUPERB ADHESIVENESS:

Ordinary greases are unable to resist the "Rate of slide relative to pressure & Centrifugal Force" in open gear mechanism applications. This causes the grease to squeeze out or fling off, leaving the metal surfaces exposed to corrosion, oxidation and metal-to-metal wear.

Omega 73 has an affinity for metal and clings to the gears!



EXTRA CUSHIONING PROPERTY:

Omega 73's cushioning property (due to its package of thickener and highly refined base fluid) provides extra protection to the open gears against metal-to-metal wear. In addition, this reduces the vibration and noise levels that are potentially damaging to the open gear units and annoying to the personnel working around them.

TEXTURE RETENTION:

Unlike ordinary greases that easily harden, Omega 73 retains its original soft texture. Ordinary greases thin down and squeeze out, even under slight temperature increases. Omega 73 retains its texture and stays in position. It seals out the dust that causes wear in locations where just such conditions prevail: -

Construction Mining Stone Quarries

Dam Building Farms Land Reclamation

APPLICATION:

Omega 73 has unlimited applications in open gear equipment: Cranes, hoists, wind-pumps, water pumps, winches, heavy equipment, timber drags, rail pulleys, funiculars, cable ways, ski lifts and thousands more.



TYPICAL DATA:

TEST	ASTM TEST METHOD	Test Result NLGI# 2
Colour	-	Black
Texture	-	Smooth & Tacky
Mineral Oil Base: -		
Viscosity, cSt at 100°C	D-455	72
Viscosity, cSt at 40°C	D-455	1,488
Viscosity Index, min.	D-2270	111
Flash point, °C (°F)	D-92	254 (489)
Pour point, °C (°F)	D-97	-12 (10.4)
Dropping Point, °C (°F)	D-2265	None
Shell Roll Stability,	D-1831	6.0
Point Change		
Timken OK load, lbs. min.	D-2509	40
Rust Prevention	D-1743	Pass
Oil Separation, 500 hrs.	D-1742	No trace
Worked Penetration @77°F	D-217	265-295
Operating Temperature Range	-	-8 to 200
°C (°F)		(17.6 to 392)

[#] The characteristics given above are typical of current production only and slight batch to batch variations should be expected.

-Total Quality Maintenance

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MATERIAL SAFETY DATA SHEET

DATE 01 Apr 2015

SECTION 1 - IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Product Name/Code Omega 73

Company Identification Distributor Omega Manufacturing Division, Alshawi Trading, Magna Industrial Co. Limited, Block 351, Road 51, Bldg 20, Manama - Bahrain. 1801, Guardian House, www.alshawitrading.com 32 Oi Kwan Road, info@alshawitrading.com Wanchai, Hong Kong. P.O.Box 33526 Telephone (852) 25775187 Telephone (973) 1755 0019

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SECTION 2 - HAZARDS IDENTIFICATION

Not classified as hazardous.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

<u>Ingredients</u>	<u>CAS Number</u>	<u>Wt.%</u>	<u>Classification</u>	
Highly refined mineral oil** Carbon black as thickener Molybdenum disulphide Graphite	64741-96-4 1333-86-4 1317-33-5 7782-42-5	60-100 1-10 1-10 1-5	- - -	

SECTION 4 - FIRST-AID MEASURES

Eye Contact: Flush with plenty of water for at least 15 minutes. Seek immediate medical attention. Skin Contact: Wash thoroughly with soap and water. Obtain medical attention in case of skin irritation or other cause for concern.

Inhalation: Move patient to open air.

Ingestion: Do not induce vomiting. Seek immediate medical attention.

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SECTION 5 - FIRE-FIGHTING MEASURES

Extinguishing Media: Dry chemical, waterfog, foam, sand and carbon dioxide. Special Protective Equipment for Fire Fighters: Self-contained breathing apparatus. Unusual Fire and Explosion Hazards: Dense smoke. Carbon dioxide, carbon monoxide.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Spillage: Transfer bulk of material into another container. Absorb remaining residue with proper absorbents such as sand, vermiculite. Sweep up and dispose of in accordance with local and national regulations.

SECTION 7 - HANDLING AND STORAGE

Keep containers closed. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Wash clothing before reuse. Keep away from feed and food products.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

ACGIH TLV

Highly refined mineral oils 5 mg/m³ (oil mist)
Carbon black as thickener 3.5 mg/m³
Molybdenum disulphide 15 mg/m³
Graphite 2 mg/m³

Eye Protection: Safety goggles and full-face shield. Hand Protection: Rubber or plastic oil resistant gloves. Ventilation: Use under well ventilated conditions.

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SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Black semi-solid grease

Odour: Mineral oil odor

pH: N.A.

Specific Gravity: 1.0 Vapour Pressure: N.A. Boiling Point: N.A. Melting Point: N.A. Flash Point: 227°C Flammability: N.A. Evaporation Rate: N.A.

Solubility in Water: Insoluble

SECTION 10 - STABILITY AND REACTIVITY

Stable under normal condition.

Materials to Avoid: Strong oxidizing agents, hydrogen peroxide, chromic acid, bromine.

Toxic compounds may form on thermal decomposition. Hazardous combustion products: carbon monoxide, carbon dioxide.

SECTION 11 - TOXICOLOGICAL INFORMATION

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.

Eves: 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.

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SECTION 12 - ECOLOGICAL INFORMATION

No ecological information is available at present.

SECTION 13 - DISPOSAL CONSIDERATIONS

Comply with all local and national regulations regarding disposal.

SECTION 14 - TRANSPORT INFORMATION

UN Number : Not regulated

IATA Class: Not regulated, Packing Group: Not regulated IMDG Class: Not regulated, Packing Group: Not regulated

Not considered hazardous for transport purpose.

SECTION 15 - REGULATORY INFORMATION

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SECTION 16 - OTHER INFORMATION

R-phrases: -

S-phrases: -

**The highly refined mineral oil used in this product contains less than 3% DMSO extract by IP 346.

Remarks: 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 for any loss, damage, or expense, direct or consequential, arising out of their use.