

Omega 66

NOTE:

Omega 66 is the lubricant preferred by nearly every efficient military or other quality/efficiency conscious organization in the world. Its super high performance and wide operating temperature range, plus its relatively high flash point provide essentially superior performance in all types of equipment and especially medium to high speed bearings, such as electric motors and automated or robotics equipment and machinery!

DESCRIPTION:

Omega 66 is an ultra-low temperature lubricant with outstanding benefits for both military and high technology industrial applications.

WILL NO HARDEN:

Omega 66 will not congeal or harden during severe freeze-ups. It retains its NLGI 2 rating even at the lowest temperatures. This aspect ensures moving parts are protected and lubricated at all times and especially at start-up in moderate to cold climates. Ordinary lubricants harden and form energy consuming 'drag' on moving parts.

HIGH LUBRICITY:

Omega 66 has a smooth, soft texture and forms the essential hydrodynamic "liquid-wedge" between frictional surfaces. It promotes efficient operation and lessens wear and tear.

WATER-RESISTANT:

Omega 66 is water and waterwash resistant. It also resists the tendencies found in ordinary greases to form rust-prone areas where melting snow or ice contract metal surfaces and lift away the protecting grease coating.

Omega 66 remains in place and protects all applied surfaces. Similarly, in high speed bearings, the tenacity of Omega 66 ensures applied surfaces remain protected and lubricated despite centrifugal forces which fling off ordinary greases.

CENTRALIZED SYSTEMS:

Omega 66 works well in centralized lubrication systems and remains stable, regardless of temperature fluctuations.

SPECIAL SUPPLEMENTS:

Omega 66 contains, among other materials -a formation of dibasic esters and polyphenyl ethers in conjunction with fine micronized silica. This highly developed combination provides the essential 'twin-end' temperature stability desirable in low temperature applications. Ordinary greases become solid at low temperatures and form hard, abrasive 'flows' that claw the metal surface. This results in severe wear and rapid seizure. In ultra-cold climates, equipment failure is not only hazardous to life, but is also extremely difficult to rectify.

Omega 66 is also specially suited to bearing applications due to its good "stay put" qualities. It is suitable for most high speed bearings, for example, a 10mm (internal diameter) bearing set operating at 25,000 to 30,000 rpm. or a 20mm bearing at 12,500-15,000 rpm or even a 30mm bearing operating at 8,500 to 10,000 rpm.

Omega 66 meets Military Specification: MIL-G-10924D (Qualification of military specification documented under code M 7628)

TYPICAL DATA:

TEST	ASTM TEST METHOD	TEST RESULT
Mineral Oil Base: -		
Viscosity @100°F, SUS	D-88	60-80
Flash Point, COC, °C (°F)	D-92	154(310)
Pour Point, °C (°F)	D-97	-54(-65)
Dropping Point, °C (°F)	D-566	143(290)
Worked Penetration @77°F, 150 gm cone	D-217	265-295
Oxidation Stability, P.S.I. drop in 100 hrs.	D-943	3.0
Water Washout, % loss after 2 hrs. @175°F	D-1264	#1 rating
Corrosion Resistance	D-1261	Pass
Differential Thermal Analysis @55°C	D-1837	Stable
Low Temperature Torque	D-1478	Ultra-low
Wheel Bearing	GM-9048	Excellent
NLGI Grade	-	#2
Operating Temperature Range, °C (°F)	-	-54 to 121 (-65 to 250)
Color		Blue Sparkle

Magna Industrial reserves the right to modify or change this product for purposes of improving its performance characteristics.

OPIM 66.3	Version 1.0	Revision 1.0	Rev. Date: 27 June, 2013	Reference: CKL
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MATERIAL SAFETY DATA SHEET

DATE 04 May 2015

SECTION 1 - IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Product Name/Code Omega 66

Company Identification

Omega Manufacturing Division,
Magna Industrial Co. Limited,
1801, Guardian House,
32 Oi Kwan Road,
Wanchai, Hong Kong.

Distributor

Alshawi Trading,
Block 351, Road 51, Bldg 20, Manama - Bahrain.
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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**	64741-97-5	60-100	-
Calcium 12-hydroxy thickener	66071-81-6	10-30	-

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)

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

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Blue semi-solid grease
Odour: Mineral oil odour
pH: N.A.

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Specific Gravity: 0.95
Vapour Pressure: N.A.
Boiling Point: N.A.
Melting Point: N.A.
Flash Point: >140°C C.O.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.

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.

SECTION 12 - ECOLOGICAL INFORMATION

No ecological information is available at present.

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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 oils used in this product contains less than 3% DMSO extract as measured 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.