

Omega 647

DESCRIPTION:

Omega 647 was developed as a complementary chain lubricant to the widely-accepted and popular Omega 646 "High Tech" Fluid Lubricant for Chains, and utilizes an advanced synthetic formula, making it suitable for higher temperature operating conditions than conventional mineral oil-based products.

PERFORMANCE CHARACTERISTICS:

In general terms, Omega 647 is engineered for high performance lubrication on chains equal to its sister Omega 646. However, in addition to superior lubricity, Omega 647 exhibits three technical advantages:

"STAY-PUT" QUALITY

Omega 647 is blended using a specially-developed high tackiness agent. This agent enables Omega 647, on application to chains, to adhere tenaciously to the pores within the metal but with a built-in elasticity to help itself spread out along the chain and rollers without squeezing out or being pressed out. This extraordinary adhesive quality enables Omega 647 to exert an especially high "cling" force to applied metal surfaces and, even in high speed chain applications where the centrifugal forces cause ordinary lubricants to fling off, Omega 647 remains stubbornly in place.

ELIMINATES STUBBORN, DOWNTIME-INDUCING CHAIN RESIDUES

Omega 647, even exposed to elevated temperatures over extended periods will not dry, burn off or form any carbonaceous gum, varnish or coke. With ordinary chain lubricants, these carbon residues interfere with the free movement of the chain and causes chain "jumping", clatter and slip, increasing chances of breakage and injury or other losses.

In addition, equipment has to be shut down and the chain(s) must be dismantled and cleaned with solvent and brushes - an unenviable and time-and labour-intensive undertaking. Omega 647, even when exposed to extremely high temperatures for long periods will simply vaporize. All that is required is to top up drip, feed or bath tank with more Omega 647. No additional labour or work stoppage for chain cleaning is required.

VIRTUAL "SMOKELESS" QUALITY

Omega 647 exhibits a low smoke and normally virtually "smokeless" quality when subjected to high temperatures. This makes Omega 647 more acceptable for use in food processing plants and also in enclosed or badly-ventilated areas. Worker morale is also improved due to drastically-reduced smoke levels.

VERSATILE PERFORMER:

Omega 647 is perfect for all chain lubrication applications, especially where extremes of temperature are experienced. It is recommended for stenter chains, oven chains, kiln chains, heat treatment conveyors, motorcycle, snowmobile and chainsaw chains. It is also suitable for open gears and lubrication of amusement park ride equipment, such as chains, rails, guides and rollers.

TYPICAL DATA:

TEST	ASTM TEST METHOD	OMEGA 647
ISO Viscosity Grade	D-2422	220
Density kg/L @ 15°C	D-1298	0.867
Viscosity, cSt @ 40°C	D-445	226
@ 100°C	D-445	17.1
Viscosity Index	D-2270	77
Flash Point, COC, °C(°F)	D-92	171(340)
Pour Point °C(°F)	D-97	-27(-17)
Foaming Characteristics, All sequences, After settling	D-892	Nil
Carbon Residue, Conradson, % Mass*	D-189	0.02
Rust-Preventing Characteristics - Salt Water, 48 hours	D-665	Pass
Total Base Number, mg KOH/g	D-2896	2.3
Ash Sulphated, % Mass**	D-874	1.65
Calcium, % Mass	AA	0.066
Magnesium, % Mass	AA	0.037
Nitrogen, % Mass	Kjeldahl	0.035
Phosphorus, % Mass	D-1091	0.090
Sodium, % Mass	AA	0.068
Zinc, % Mass	AA	0.092
Molybdenum Disulphide, % Mass**	Gravimetric	1.0

* In excess of Ash content

** MOS₂ contribution 0.9

MAGNA INDUSTRIAL CO. LIMITED

Total Quality Maintenance

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MATERIAL SAFETY DATA SHEET

DATE 01 Aug 2014

SECTION 1 - IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Product Name/Code Omega 647

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.
www.alshawitrading.com
info@alshawitrading.com
P.O.Box 33526

Telephone (852) 25775187
Fax (852) 25773190

Telephone (973) 1755 0019
Fax (973) 1755 5108

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>
Polybutene	9003-28-5	60-100	-
Molybdenum disulphide	1317-33-5	1-10	-

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 oil	5 mg/m ³ (oil mist)
Molybdenum disulphide	15 mg/m ³

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: Dark grey liquid

Odour: Mineral oil odor

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pH: N.A.
Specific Gravity: 0.87
Vapour Pressure: N.A.
Boiling Point: N.A.
Melting Point: N.A.
Flash Point: above 150°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: -

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.