

Omega 613

The use of ordinary or inadequate lubricants in today's compressors is dangerous. A reaction caused when heat and carbon formation are swept into the receiver can be an explosion or a hazardous fire. Unfortunately, this fact is often ignored or misunderstood until it is too late.

DESCRIPTION:

Omega 613 is a superb air compressor & vacuum pump lubricant designed to provide a new dimension to compressor/vacuum pump safety and cost-saving functionality. The ideal characteristics such an oil should have are, high chemical stability, good flash point, high thermal stability, high degree of refinement and purity, and it must be heavily fortified against the formation of rust, corrosion and oxidation. It must have a balanced viscosity that will ensure the essential protection for fine clearances and tolerances.

CARBON RESISTANCE:

Omega 613 resists the formation of carbon. Ordinary oils promote this formation because of their high degree of impurity and their susceptibility to contamination. This combination forms rapid 'hot spots' that soon develop into granite-like carbon deposits. Omega 613's exceptional lubricity not only closes seals and thereby improves pressure output, but also resists high temperature destruction.

VISCOSITY STABLE:

Omega 613 has built-in viscosity improvers that provide the added fine clearance protection essential to long term compressor/vacuum pump efficiency. The fluidity or lubricant texture remains stable despite temperature variations.

OXIDATION RESISTANT:

Omega 613 provides exceptional protection against oxidation. Since compressor and/or vacuum pump equipment is constantly subjected to the oxygen in the air, unless exceptional protection is provided, oxidation will occur. Oxidation causes corrosion which leads to the disintegration of costly equipment.

APPLICATIONS:

Omega 613 is extremely versatile and can be used on all types of compressor equipment including:

- Screw Compressors (dry and flooded)
- Rotary Compressors
- Gear Compressors
- Centrifugal Compressors
- Twin-Lobe Compressors
- Axial Flow Compressors
- Internally Compounded Compressors
- All types of Vacuum Pumps

The major function in all cases is based on a superiority in the suction, transfer, compression and discharge actions. Generally speaking, this type of equipment can be divided into two categories.

- (A) The Mechanical or positive displacement category.
- (B) The Centrifugal or active force acting type for moving entrapped gas.

Omega 613 provides the necessary protection and acts as a safety factor, regardless of whether the equipment is the Multistage Reciprocating Compressor type or the Expansion System type (with a cryogenic temperature of exceptionally low variance) or Vacuum Pumps.

SUPERIOR FOR VACUUM PUMPS:

Since Vacuum Pumps function similarly to Air Compressors - in reverse - Omega 613 is also strongly recommended for achieving maximum performance with all types of vacuum pumps.

CORRECT TEXTURE FOR DRIP FEEDING:

One major problem with all ordinary oils is the poor viscosity - preventing correct drip and feed speed. Omega 613 however, has built-in stability so that feed timing can be accurately calculated to meet the demands of the equipment. Too fast an input leads to carbon build-up and too slow an input means disastrous metal-to-metal contact.

TYPICAL DATA:

TEST	ASTM TEST METHOD	SAE 10	SAE 20	SAE 30	SAE 40
ISO Viscosity Grade	D-2422	32	68	100	150
Density, kg/L @ 15°C	D-1298	0.867	0.871	0.871	0.882
Viscosity, cSt @ 40°C	D-445	32.9	68	100	150
@ 100°C	D-445	5.8	8.7	11.3	14.8
Viscosity Index	D-2270	105	105	101	101
Flash Point, COC, °C	D-92	215	243	261	264
Pour Point, °C	D-97	-21	-27	-27	-24
Aniline Point °C	D-611	116	119	111	113
Copper Corrosion (3 hrs, 100°C)	D-130	1b	1b	1b	1b
Foaming Characteristics - All Sequences, After Settling	D-892	Nil	Nil	Nil	Nil
Oxidation Characteristics - TOST life, hours	D-943	>5000	>5000	>5000	>4000
Rust-Preventing Characteristics	D-665	Pass	Pass	Pass	Pass
Air Release, 2 min	Typical NFT 60149	2 min.	2 min.	2 min.	2 min.
Zinc, % Mass	AA	0.027	0.027	0.027	0.027

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

MAGNA INDUSTRIAL CO. LIMITED

Total Quality Maintenance

1801, Guardian House, 32 Oi Kwan Road, Wanchai, Hong Kong Tel: (852) 2577 5187 Fax: (852) 2577 3190
E-Mail: magna@magnagroup.com Web Site: www.magnagroup.com

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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 613

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>
Highly refined mineral oil**	64742-65-0	60-100	-

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/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: Amber liquid
Odour: Mineral oil odour
pH: N.A.

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Specific Gravity: 0.90
Vapour Pressure: N.A.
Boiling Point: N.A.
Melting Point: N.A.
Flash Point: above 100°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 oil 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.