



Omega
The Ultimate Lubricant

515



Nonfood Compounds
Category Code : H1
Registration Number : 150297

DESCRIPTION:

Omega 515 Ultra Dura Synthetic FG Compressor Oil is an ultra-durable compressor oil quality designed to protect and lubricate commonly used compressors, particularly reciprocating compressors in the food & beverage industry. It is formulated with dual synthetic base fluids (including Alkylated Naphthalene synthetic fluid) and Omega's proprietary, record-proven package of additives for compressors to ultimately reduce the overall maintenance cost by extended oil interval, reduced level of contamination and improved oil consumption rate.



Appearance, texture and colors depicted in this photo are for indicative purpose only.

NEW CHEMICAL TECHNOLOGY – NEW PERFORMANCE LEVEL:

Compressors in the food and beverage industry are constantly exposed to harsh operating conditions such as high temperatures and wet operating conditions. The demanding maintenance professionals expect high-performance lubricating oils for these machines to possess superb thermo-oxidative and hydrolytic stability to deliver reliable and prolonged protection and lubrication. Quality designed to outperform other synthetic food grade compressor oils, Omega 515 surely can meet and even exceed these challenging requirements.

Omega 515 is formulated with an innovative chemical technology using synthetic base fluids meeting the requirement for incidental food contact as prescribed by FDA 21 CFR 178.3570. Alkylated Naphthalene (AN), a highly chemically stable synthetic fluid, is blended synergistically with Polyalphaolefins (PAO) to take Omega 515 to a new level of premium performance.

The “dual synthetic base fluids” formulation provides Omega 515 with outstanding built-in thermo-oxidative stability. Alkylated Naphthalene is a highly chemically stable synthetic fluid. The electron-rich naphthalene rings of Alkylated Naphthalene are capable of trapping the oxidizing radicals and thus disrupt the oxidation chain process, preventing the oxidative degradation even at high temperatures.

Air compressor oils are also exposed to moisture during normal operation or to condensation as the equipment cools after a shut down. Hydrolytic stability, the ability of a lubricant to resist chemical decomposition in the presence of water, is another important property for determining the stability of compressor oils. Omega 515 is extremely hydrolytically stable because Alkylated Naphthalene does not contain reactive functional groups that chemically react with water.

With the built-in outstanding properties mentioned above, Omega 515 greatly reduces the risk of accumulation of carbon deposits and corrosive acids caused by oxidation and reaction with moisture in the compressors, thus significantly improves the re-lubrication intervals. Depending on the operating conditions, Omega 515 is capable of sustaining its high performance up to 16,000 hours (sixteen thousand hours).

OTHER EXCELLENT FEATURES:

In addition to the thermo-oxidative and hydrolytic stability, Omega 515's special "dual base fluids" formulation also offers the following excellent chemical and physical properties:

- a) Low volatility – Omega 515 significantly reduces loss of oil due to evaporation and thus optimizes oil consumption. It also means there is less oil to remove in the air/oil separators and fewer air filter changes.
- b) Superb compatibility with most elastomers or sealing materials – Omega 515 minimizes the risk of oil leakage due to deformation of sealing materials. This also improves the oil consumption rate.
- c) Excellent demulsibility – Omega 515 separates condensed water quickly and completely, thus preventing the risk of water contamination. d/ High flash and fire points – Omega 515 performs well at high temperatures over 200°C. Combined with its extremely low carbon deposits forming tendency, this excellent property of Omega 515 lowers the risk of fire and explosion due to compressor overheat.
- d) Low pour point – Omega 515 offers excellent lubricity and maintains designed viscosity at extremely low temperatures. This results in excellent cold-temperature starting to guarantee efficient compressor performance regardless of temperature change.
- e) Omega 515 is listed by NSF as H-1 lubricant for incidental contact with food.

EXTRA PROTECTION:

Omega 515 is fortified with Omega's new proprietary package of additives, an improved version based on the technology of other successful Omega compressor oils. This special package contains various performance-enhancing additives (e.g. anti-wear additive, antifoaming agent and corrosion inhibitor, etc.) to provide extra-protection to the compressors.

APPLICATIONS:

Omega 515 is recommended for providing ultra-long protection and lubrication to all types of oil-lubricated centrifugal and positive displacement compressors (especially reciprocating compressors) subjected to arduous working conditions in the food and beverage processing industry.

Note: Follow equipment manufactures' instruction and recommendation when applying Omega 515.

TYPICAL DATA:

TEST	ASTM TEST METHOD	TEST RESULT
		ISO VG100
Appearance	--	Light Yellow
Density	D-1298	0.848
Viscosity, cSt @ 40°C	D-445	100
Viscosity, cSt @ 100°C	D-445	13.8
Viscosity Index	D-2270	139
Pour Point °C	D-97	-42
Flash Point, COC, °C	D-92	260
TAN, mg KOH/g	D-974	0.7
Foaming Characteristics:-		
Sequence 1/2/3	D-892	Nil
Copper Strip Corrosion	D-130	1b
Rust Characteristics	D-665	Pass
Evaporation Loss, 6.5 hours @ 205°C, % Mass	D-972	2.7

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

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SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name: Omega 515 ****Manufactured in Australia****

1.2. Relevant identified uses of the substance or mixture and uses advised against

Application: Lubricant oil for the food industry

1.3. Details of the supplier of the safety data sheet

Supplier: EU importer: Sovereign Lubricants (UK) Ltd, Crowtrees Lane,
Rastrick, West Yorkshire, HD6 3LZ
T: 01484 718674 - F: 01484 400164
enquiries@sovereign-omega.co.uk
www.sovereign-omega.co.uk

Manufacturer: ITW PP & F Korea Limited.
13th Fl., Unit B, PAX Tower
609 Eonju-ro, Gangnam-gu
Seoul, Korea 06108
Tel:+82-2-2088-3560
Fax:+82-2-513-3567
www.magnagroup.com

1.4. Emergency telephone number

Emergency telephone: Call a Poison Center, emergency number or doctor/physician.

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

CLP: Not classified.

2.2. Label elements

The substance/mixture does not meet the criteria for classification and labelling.

2.3. Other hazards

Other: Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

No classified ingredients, or those having occupational exposure limits, present above the levels of disclosure.

CLP:

%:	CAS-No.:	EC No.:	REACH Reg. No.:	Chemical name:	Hazard classification:	Notes:
<85	68037-01-4	500-183-1	01-2119486452-34-	Polyalphaolefin	-	
<25	-	-	-	Polyalkylated naphthalene	-	

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SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation: Move into fresh air and keep at rest. In case of persistent throat irritation or coughing: Seek medical attention and bring these instructions.

Skin contact: Remove contaminated clothing immediately and wash skin with soap and water. In case of rashes, wounds or other skin disorders: Seek medical attention and bring along these instructions.

Eye contact: Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Seek medical attention and bring along these instructions.

Ingestion: Immediately rinse mouth and drink plenty of water. Keep person under observation. If person becomes uncomfortable seek hospital and bring these instructions. Contact physician if larger quantity has been consumed.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects: See section 11 for more detailed information on health effects and symptoms.

4.3. Indication of any immediate medical attention and special treatment needed

Medical attention/treatments: Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media: Small fires: Extinguish with carbon dioxide or dry powder.
Larger fires: Extinguish with foam, carbon dioxide or dry powder.
Cool containers exposed to heat with water spray and remove container, if no risk is involved.

Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards: During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

Protective equipment for fire-fighters: Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Avoid contact with skin and eyes. In case of spills, beware of slippery floors and surfaces.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Dam and absorb spillages with sand, earth or other non-combustible material.

6.4. Reference to other sections

References: For personal protection, see section 8.
For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Safe handling advice: Observe good chemical hygiene practices. Avoid prolonged and repeated contact.

Technical measures: Work practice should minimise contact.

Technical precautions: Mechanical ventilation may be required.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures for safe storage: No special precautions.

Storage conditions: Store in tightly closed original container. Avoid contact with oxidising agents.

7.3. Specific end use(s)

Specific use(s): Lubricant.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

No occupational exposure limit assigned.

8.2. Exposure controls

Engineering measures: Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of vapours and spray mist. Provide access to washing facilities incl. soap, skin cleanser and fatty cream.

Personal protection: Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Respiratory equipment: In case of inadequate ventilation or risk of inhalation of vapours, use suitable respiratory equipment with combination filter (type A2/P3).

Hand protection: Wear protective gloves. Rubber gloves are recommended. Other types of gloves can be recommended by the glove supplier.

Eye protection: Risk of contact: Wear goggles/face shield.

Skin protection: No special precautions.

Hygiene measures: Wash hands after contact. Wash contaminated clothing before reuse.

Environmental Exposure Controls: Should be prevented from entering drains.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance: Liquid.
Colour: Yellow.
Odour: Negligible.
pH: Not applicable.
Melting point / freezing point: Not available.
Boiling point: Not available.
Flash point: > 200°C (COC)
Evaporation rate: Not available.
Flammability (solid, gas): Not available.
Explosive limits Not available.
Vapour pressure: Not available.
Vapour density: Not available.
Relative density: ~0.85 g/cm³
Solubility: Insoluble in water. < 0.1 g/l
Partition coefficient (n-octanol/water): Not available.
Auto-ignition temperature (°C): Not available.
Decomposition temperature (°C): Not available.
Viscosity: ~100 mm²/s (40°C)
Explosive properties: Not available.
Oxidising properties: Not available.

9.2. Other information

Other data: -

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SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity: Not reactive.

10.2. Chemical stability

Stability: Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions

Hazardous Reactions: Hazardous polymerisation will not occur.

10.4. Conditions to avoid

Conditions to avoid Not known.

10.5. Incompatible materials

Incompatible materials: Strong oxidising substances.

10.6. Hazardous decomposition products

Hazardous decomposition products: Carbon oxides

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute Toxicity (Oral): Based on available data, the classification criteria are not met.

Acute Toxicity (Dermal): Based on available data, the classification criteria are not met.

Acute Toxicity (Inhalation): Based on available data, the classification criteria are not met.

Skin Corrosion/Irritation: Based on available data, the classification criteria are not met.

Serious eye damage/irritation: Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive Toxicity: Based on available data, the classification criteria are not met.

STOT - Single exposure: Based on available data, the classification criteria are not met.

STOT - Repeated exposure: Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

Inhalation: Inhalation of vapours formed during heating of the product will irritate the respiratory system and provoke coughing.

Skin contact: Prolonged or frequent contact may cause redness, itching, eczema and skin cracking.

Eye contact: Splashes may irritate. Effects are expected to be reversible.

Ingestion: Low order of acute toxicity, but aspiration following ingestion and vomiting may cause severe and potentially fatal chemical pneumonitis.

Specific effects: The harmful effects may increase in used oil.

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SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity: Not available.

12.2. Persistence and degradability

Degradability: Not available.

12.3. Bioaccumulative potential

Bioaccumulative potential: No data available on bioaccumulation.

12.4. Mobility in soil

Mobility: No data available.

12.5. Results of PBT and vPvB assessment

PBT/vPvB: This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

Other adverse effects: None known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements. Waste is classified as hazardous waste.

Waste from residues: EWC-code: 20 01 26

SECTION 14: TRANSPORT INFORMATION

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

UN-No: Not regulated.

14.2. UN proper shipping name

Proper Shipping Name: Not regulated.

14.3. Transport hazard class(es)

Class: Not regulated.

14.4. Packing group

PG: Not regulated.

14.5. Environmental hazards

Marine pollutant: Not regulated.

14.6. Special precautions for user

Special precautions: None known.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk: Not known.

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SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulation: Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, with amendments.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

The Control of Substances Hazardous to Health Regulations 2002 (S.I. 2002 No. 2677) with amendments.

EH40/2005, Workplace exposure limits 2005, with amendments.

The List of Wastes (England) (Amendment) Regulations 2005. (SI 2005 No. 895).

15.2. Chemical Safety Assessment

CSA status: No information available.

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SECTION 16: OTHER INFORMATION

The user must be instructed in the proper work procedure and be familiar with the contents of these instructions.

Handling of used oils:

Protect health - avoid prolonged and repeated skin contact. Wash with soap and water. Protect the environment - do not pollute drains, water courses or the soil. Contact your local authority for any used oil disposal instructions.

The following sections contain revisions or new statements: 1, 2, 3, 11.

The following sections contain revisions or new statements: 3

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The information on this data sheet represents our current data and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.

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