



ULTRA HIGH-PERFORMANCE AIR (& REFRIGERATION) COMPRESSOR OIL:

Based on advanced synthetic chemistry. Omega 615 provides a new performance "envelope" for compressors (including refrigeration-types) unmatched by ordinary lubricants. Its special PAO (polyalphaolefin) blend, and anti-oxidant, rust inhibited, and antifoam formulation provides this special lubricant with unmatched performance characteristics in rotary screw-and rotary vane-type compressors, using the ISO VG 46 grade; and in conventional reciprocating compressors, using the ISO VG 100.

Omega 615 provides unparalleled oxidation stability under extended, real-world operating

conditions. Ordinary compressor oils, due to their unstable characteristics, progressively thicken, alter their viscosity characteristics and tend to corrode surfaces coming into contact due to the tendency to increase in Total Acid Number (TAN).

Omega 615, on the other hand, is exceedingly oxidation-resistant and leaves no harmful deposits of varnish and carbon, thereby drastically reducing and, in some cases, virtually eliminating maintenance cleaning of compressors. The regular use of Omega 615 extends oil change intervals dramatically, reduces oil consumption and reduces repair frequencies, in direct relation to the operating costs of compressing equipment.

INCOMPARABLE PERFORMANCE CHARACTERISTICS:

Omega 615 offers the highest level of operational efficiency possible of the current state-of-the-art level. Following is a brief comparison of some of this remarkable lubricant's capabilities:

	ORDINARY COMPRESSOR OIL	OMEGA 615 ULTRA-PERFORMANCE COMPRESSOR OIL
Maximum oil life in rotary-type compressors:	2,000 HRS (MAX)	8-10,000 HRS +
Typical pour point:	-20°C	-57°C
High temperature evaporation loss @205°C	10% approx.	<3%
Compatibility with mineral oils:	-	GOOD
Low volatility:	FAIR	Excellent
Effect on most paints & finishes:	Moderate	None
Hydrolytic stability: (Stability in presence of water)	Moderate	Excellent
Anti-rust properties:	Good	Excellent
Elastomer (seal) compatibility	Dependent on seal stock	Good



OPIM615-1	Ver. 2.0	Rev. 3.0
Rev. Date: 2 Jan 2019		
Reference: CKL		

ENGINEERED TO EXCEL:

Omega 615 will provide improved wear protection at high temperatures and yet, equally prevent deposit formation in low temperature systems, such as refrigeration compressors. Due to improved antioxidants and lubricity, Omega 615 will enhance compressor efficiency while reducing discharge valve deposits.

Due to its significantly higher oxidation stability, Omega 615 ISO VG 46 is especially suitable for use in rotary screw-and rotary vane-type compressors where the operational temperature usually exceeds 100-110°C and there is markedly excessive aeration, which causes rapid deterioration in the performance of ordinary compressor oils.

Omega 615 ISO VG 100 is recommended for conventional reciprocating-type compressors which require a higher viscosity oil for optimum performance.

Also, due to Omega 615's remarkable stability at ultra low temperatures, it will also outperform the best of the ordinary refrigeration compressor oils (which only perform down to their -40°C pour point), while Omega 615's pour point is -57°C.

TEST	ASTM TEST	TEST RESULT			
TEST	METHOD	ISO VG 46	ISO VG 100		
Appearance	Visual	Off Color White	Off Color White		
Density, Kg/L @ 15°C	D-1298	0.835	0.838		
Viscosity, cSt @ 40°C	D-445	46	99		
Viscosity, cSt @ 100°C	D-445	7.8	14.2		
Viscosity, cSt @ -40°C		30000	82000		
Viscosity Index	D-2270	138	147		
Flash Point, COC °C(°F)	D-92	258(496)	264(507)		
Pour Point, °C(°F)	D-97	-57(-71)	-45(-49)		
Total Acid Number, mg KOH/g	D-974	0.7	0.7		
Foaming Characteristics -					
All Sequences, After Settling	D-892	Nil	Nil		
Rust Prevention Characteristics	D-665	Pass	Pass		
Copper Strip Corrosion, 3 hours @ 100°C	D-130	1b	1b		
Evaporation Loss -	Evaporation Loss -				
6.5 hrs @205°C, % Mass	D-972	3	2.7		
Oxidation Characteristics -					
Hours to TAN 2.0	D-943	>3000	>2500		
Carbon Residue, Conradson, % Mass	D-524	0.02	0.02		

TYPICAL DATA:

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



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 OPIM615-2
 Ver. 2.0
 Rev. 3.0

 Rev. Date: 2 Jan 2019
 Reference: CKL

APPLICATION:

Follow equipment manufacturers' filling and draining instructions. Omega 615 ISO VG 46 provides excellent service characteristics in flooded rotary compressors (vane-type and screw-type). The ISO VG 100 grade is engineered specially to provide improved performance for reciprocating-type air compressors. Oil life exceeds that of ordinary compressor oils by four hundred to five hundred percent!



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OPIM615-3	Ver. 2.0	Rev. 3.0
Rev. Date: 2 Ja	an 2019	
Reference: CK	L	



1/11

2022-12-30

GB-EN/8.0

Product name: Supersedes date: Product No.:	Omega 615 2019-08-20	Page: Last revised date: SDS-ID:
		5D5-ID.
SECTION 1: IDENTIFICAT COMPANY/UNDERTAKING	ION OF THE SUBSTANCE/MIXTURE AN G	D OF THE
1.1. Product identifier		
Product name:	Omega 615	
Container size:	5 I, 20 I	

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

Application:

Lubricant.

1.3. Details of the supplier of the safety data sheet

<u>Supplier:</u>	GB importer:	Distributed by:	Trust Engineering Company
<u>Manufacturer:</u>	ITW PP & F Korea Limited 13th FI., Unit B, PAX Tower 609 Eonju-ro, Gangnam-Gu Seoul, Korea 06108 Tel:+82-2-2088-3560 Fax:+82-2-513-3567 magna@magnagroup.com		9 Abdel Hamid El Deeb Street Alexandria, 21613 Egypt T: +(20)3 5822779 T: +(20)10 1223554 5 Ahmed Shaker Street Fourth Zone Nasr City, 11586 Egypt T:+(20)2 26909965 T: +(20)10 1223553
	www.magnagroup.com		info@trustengineering-eg.com www.trustengineering-eg.com
1.4. Emergency telephone nu	mber		www.uustengineening-eg.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: The product is not classified.

2.2. Label elements

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

2.3. Other hazards	
<u>PBT/vPvB:</u>	This product does not contain any PBT or vPvB substances.
<u>Other:</u>	Prolonged or repeated contact with skin may cause redness, itching, irritation, eczema, skin cracking and oil acne.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Product name:	Omega 615	Page:	2/11
Supersedes date:	2019-08-20	Last revised date:	2022-12-30
Product No.:		SDS-ID:	GB-EN/8.0

The product contains: synthetic oils and additives.

All substances in the product are either registered or exempt from registration under REACH. Only classified substances above threshold limits or substances with an exposure limit are shown.

CLP:

<u>%:</u>	CAS-No.:	<u>EC No.:</u>	REACH Reg. No:	Chemical name:	Hazard classification:	Notes:
60-100	68037-01-4	500-183-1	01-2119486452-34- 0018	Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated	-	

SECTION 4: FIRST AID MEASURES			
4.1. Description of first aid m	easures		
Inhalation:	Move into fresh air and keep at rest. In case of persistent throat irritation or coughing or after inhalation of oil mist: Seek medical attention and bring along these instructions.		
<u>Skin contact:</u>	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.		
<u>Eye contact:</u>	Immediately flush with plenty of water for at least 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 1-2 glasses of water. Keep person under observation. If uncomfortable: Transportation to hospital. Bring along these instructions.		

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

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

Medical attention/treatments: Treat symptomatically.

Product name:	Omega 615	Page:	3/11
Supersedes date:	2019-08-20	Last revised date:	2022-12-30
Product No.:		SDS-ID:	GB-EN/8.0

SECTION 5: FIREFIGHTING MEASURES

SECTION 5. TINET ISTTIN			
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. Do not use water jet as an extinguisher, as this will spread the fire.		
5.2. Special hazards arising fr	om 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.		
SECTION 6: ACCIDENTAL	RELEASE MEASURES		
6.1. Personal precautions, pro	tective equipment and emergency procedures		
Personal precautions:	Avoid inhalation of oil mist and contact with skin and eyes. Follow precautions for safe handling described in this safety data sheet.		
6.2. Environmental precaution	<u>S</u>		
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:	Absorb spillage with oil-absorbing material. Clean contaminated area with oil- removing material.		
6.4. Reference to other sections			
References:	For personal protection, see section 8. For waste disposal, see section 13.		

Product name:	Omega 615	Page:	4/11
Supersedes date:	2019-08-20	Last revised date:	2022-12-30
Product No.:		SDS-ID:	GB-EN/8.0

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Safe handling advice:	Observe good chemical hygiene practices. Avoid prolonged and repeated contact with oil, particularly used oil. Always remove oil with soap and water or skin cleaning agent, never use organic solvents. Do not use oil-contaminated clothing or shoes, and do not put rags moistened with oil into pockets.
Technical measures:	Use work methods which minimise oil mist production.
Technical precautions:	When working with heated oil, mechanical ventilation may be required.
7.2. Conditions for safe storage	ge, including any incompatibilities
Technical measures for safe	No special precautions.
storage:	
<u>storage:</u> Storage conditions:	Store in tightly closed original container.
	Store in tightly closed original container.

Product name:	Omega 615	Page:	5/11
Supersedes date:	2019-08-20	Last revised date:	2022-12-30
Product No.:		SDS-ID:	GB-EN/8.0

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

No occupational exposure limit assigned.

Engineering measures:	Provide adequate ventilation and minimise the risk of inhalation of vapours and oil mist. Provide access to washing facilities incl. soap, skin cleanser and fatty cream.
Personal protection:	Personal protection equipment should be chosen according to the relevant standards and in discussion with the supplier of the personal protective equipment.
Respiratory equipment:	In case of inadequate ventilation or risk of inhalation of oil mist, suitable respiratory equipment with combination filter (type A2/P3) can be used.
Hand protection:	Risk of contact: Wear protective gloves. Nitrile gloves are recommended. Thickness: >0.3 mm; Breakthrough time: >240min. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.
Eve protection:	Risk of contact: Wear goggles/face shield.
Skin protection:	Wear apron or protective clothing in case of splashes.
Hygiene measures:	Wash hands after contact. Wash contaminated clothing before reuse.
Environmental Exposure Controls:	Not available.

Product name:	Omega 615	Page:	6/11
Supersedes date:	2019-08-20	Last revised date:	2022-12-30
Product No.:		SDS-ID:	GB-EN/8.0

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties Physical state: Clear liquid. Almost odourless. Odour: Odour threshold: Not available. <u>pH:</u> Not available. Melting point / freezing point: Not available. Boiling point: Not available. > 200°C Flash point: Evaporation rate: Not available. Explosive limits Not available. Not available Ve

<u>Vapour pressure:</u>	Not available.
<u>Vapour density:</u>	Not available.
Relative density:	~ 0,85
Solubility:	Immiscible with water.
Partition coefficient (n- octanol/water):	Not available.
<u>Auto-ignition</u> temperature (°C):	Not available.
Decomposition temperature (°C):	Not available.
<u>Viscosity:</u>	Not available.
Explosive properties:	Not available.
Oxidising properties:	Not available.
9.2. Other information	
Other data:	Kinematic viscosity: ~ 100 mm ² /s (40 $^{\circ}$ C)

Product name:	Omega 615	Page:	7/11
Supersedes date:	2019-08-20	Last revised date:	2022-12-30
Product No.:		SDS-ID:	GB-EN/8.0

SECTION 10: STABILITY AND REACTIVITY		
10.1. Reactivity		
Reactivity:	Not reactive.	
10.2. Chemical stability		
<u>Stability:</u>	Stable under normal temperature conditions.	
10.3. Possibility of hazardous	s reactions	
10.4. Conditions to avoid		
Conditions to avoid	Heat, sparks, flames.	
10.5. Incompatible materials Incompatible materials:	Strong oxidising substances.	
10.6. Hazardous decomposition products		
Hazardous decomposition products:	None known.	

Product name:	Omega 615	Page:	8/11
Supersedes date:	2019-08-20	Last revised date:	2022-12-30
Product No.:		SDS-ID:	GB-EN/8.0

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

The harmful effects may increase in used oil.

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.
<u>Respiratory or skin</u> 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 oil mist or vapours formed during heating of the product will irritate the respiratory system and provoke coughing.
Skin contact:	Degreasing. Prolonged or frequent contact may cause redness, itching, eczema and skin cracking.
Eve contact:	Splashes may irritate.
Ingestion:	May irritate and cause malaise.
Specific effects:	Prolonged or repeated contact with used oil may cause serious skin diseases, such as dermatitis.
11.2. Information on other haz	zards

Endocrine disruptingThe product does not contain any substance identified as having endocrine
disrupting properties.

Product name:	Omega 615	Page:	9/11
Supersedes date:	2019-08-20	Last revised date:	2022-12-30
Product No.:		SDS-ID:	GB-EN/8.0
SECTION 12: ECOLOGIC	AL INFORMATION		
12.1. Toxicity			
Ecotoxicity:	Oil spills are generally hazardous to the enviro	nment.	
12.2. Persistence and degrada	ability		
Degradability:	The product is slowly degradable.		
12.3. Bioaccumulative potentia	al		
Bioaccumulative potential:	No data available on bioaccumulation.		
12.4. Mobility in soil			
Mobility:	No data available.		
12.5. Results of PBT and vPvl	<u>B assessment</u>		
<u>PBT/vPvB:</u>	This product does not contain any PBT or vPv	B substances.	
12.6. Endocrine disrupting properties			
Endocrine disrupting properties:	The product does not contain any substance in disrupting properties.	dentified as having endo	ocrine
12.7. Other adverse effects			
Other adverse effects:	None known.		
SECTION 13: DISPOSAL	CONSIDERATIONS		
13.1. Waste treatment method	ls		
Dispose of waste and residues	s in accordance with local authority requirement	s. Waste is classified as	6

hazardous waste.

<u>Waste from residues:</u> EWC-code: 13 02 06

<u>Contaminated packaging:</u> Dispose of contaminated packings as residue.

Product name:	Omega 615	Page:	10/11
Supersedes date:	2019-08-20	Last revised date:	2022-12-30
Product No.:		SDS-ID:	GB-EN/8.0

SECTION 14: TRANSPORT INFORMATION

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

14.1. UN number

UN-No:

14.2. UN proper shipping name

Proper Shipping Name:

14.3. Transport hazard class(es)

Class:

14.4. Packing group

<u>PG:</u>

14.5. Environmental hazards

Marine pollutant:

Environmentally Hazardous

substance:

14.6. Special precautions for user

<u>Special precautions:</u> None known.

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

Transport in bulk: Not relevant.

SECTION 15: REGULATORY INFORMATION

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

National regulation:	UK Statutory Instruments, 2021 No. 904, CONSUMER PROTECTION ENVIRONMENTAL PROTECTION HEALTH AND SAFETY. The REACH etc. (Amendment) Regulations 2021. 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. The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019 (SI 2019 No. 720), as amended
	 720), as amended. 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 chemical safety assessment has been carried out.

Product name:	Omega 615	Page:	11/11
Supersedes date:	2019-08-20	Last revised date:	2022-12-30
Product No.:		SDS-ID:	GB-EN/8.0

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, 4, 6, 7, 8, 11, 12, 13, 16.

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Abbreviations and acronyms	
used in the safety data sheet:	CSA= Chemical Safety Assessment.
	PBT = Persistent, Bioaccumulative and Toxic.
	vPvB = very Persistent and very Bioaccumulative.
Additional information:	Classification according to Regulation (EC) No. 1272/2008: Calculation method.

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.

Made by DHI - Environment and Toxicology, Agern Allé 5, DK-2970 Hørsholm, Denmark. www.dhigroup.com.