



**Omega**  
The Ultimate Lubricant

# 615



Nonfood Compounds  
Category Code : H1  
Registration Number : 130634

## 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 anti-foam 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

## 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 anti-oxidants 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.

## TYPICAL DATA:

TEST	ASTM TEST METHOD	TEST RESULT	
		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 -			
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

## 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!