



Superior Refrigeration Oil

- *Designed specially for refrigerators – soluble with most refrigerants.*
- *Remains stable – does not form waxy deposits that clog oilways.*
- *Will not ice up – retains constant fluid texture.*

TRUST *Save Money*
OMEGA *Enhance Performance*
TO *Extend Service Life*



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OMEGA ULTIMATE LUBRICANTS

SPECIAL FEATURES

Omega 611 Superior Refrigeration Oil that provides constant lubrication to rotors, pistons and bearings in all types of refrigeration compressor systems.

- **Omega 611** is formulated specifically for refrigerators – soluble with most refrigerants.
- **Omega 611** remains stable at low temperatures – does not form waxy or solid deposits that block oilways and orifice passages.
- **Omega 611** will not ice up – retains constant fluid texture to ensure consistent, long-lasting protection.

OUTSTANDING PROPERTIES

Omega 611 is the superior refrigeration oil that:

- Contains special additives to enhance the oil's natural high resistance to oxidation – resists corrosion and cancerous rust.
- Contains special foam suppressors to minimize foaming in compressors.
- Is uniquely formulated to eliminate the formation of virtually all deposits and keep expansion valves and orifice passages clean and clear.
- Has high dielectric value for outstanding reliability.

USE FOR

Omega 611 is the ultra low temperature stable refrigerator lubricant designed to provide trouble-free, long-term constant performance for all types of refrigeration compressor systems – light, medium and heavy-duty.

Omega 611 has been specially formulated to withstand all severe operating conditions present in today's ultra low temperature, high-performance refrigeration compressors.

Use **Omega 611** for refrigerators using CFC, HCFC or ammonia as refrigerant.



Omega

The Ultimate Lubricant

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The information contained in this publication is to the best of our knowledge and accurate at the time of issue in October, 2016

DESCRIPTION:

Omega 611 is an ultra-low temperature stable refrigerator lubricant, designed to provide trouble-free, long-term, constant performance for all types of refrigerators - light, medium and heavy-duty. Its formulation took exhaustive research and development using the most sophisticated scientific equipment available. It contains minute quantities of silicone-iron in a twin state isotropy and anisotropy. This remarkable reverse-cycle system empowers the lubricant to form a tenacious hold on the

surface as well as the ability to lift in-system contaminants and foreign matter, and pass them through without build-up.

MISCIBILITY:

Omega 611 is miscible with most refrigerants. However, unlike ordinary oils, it does NOT form a waxy or solid deposit at extreme temperatures. Its exceptional low temperature characteristics ensure that it remains stable - regardless of temperature changes.

REFRIGERATION:

A cold temperature can be created by compressing a suitable 'refrigerant' (i.e. Freon, Propane, Carrene, Ammonia) into a restricted area and sealing it. By releasing the compressed fluid through an expansion valve, it evaporates and the heat is removed, thereby lowering the temperature. The faster the evaporation takes place, the lower the resultant temperature will be.

REFRIGERATION LUBRICANT:

The most important functions of a refrigeration lubricant are: protection, lubrication and the prevention of build-up in and around the expansion valve. The method of lubrication is either force-feed or splash. In this way, rotors, pistons and bearings are constantly being lubricated. Omega 611 provides a number of special cost-saving benefits.

PERMEABILITY:

Ordinary oils used for refrigerators are often waxy and easily solidify. They have low surface permeability, resulting in the formation of oxides within the system. This soon leads to scaly build-up, which in turn promotes corrosion, and the eventual breakdown of the equipment. Omega 611 however, is a finely balanced poly-crystalline that magnetically permeates the surface and forms a strong and completely protective lubricant film.

VAPOUR FORMATION:

Relative humidity, or the formation of a vapour, is expressed as a ratio (by percentage) of the actual vapour pressure to the saturated vapour pressure at a given temperature. The formation of vapour or condensation in low temperature equipment is natural. However, the quantity varies with climatic fluctuations - being higher in high-temperature climates, and lower in low-temperature climates. Vapour is the forerunner of corrosion and rust. Omega 611 displays a capillary action to seal components, and prevent condensation and vapour from penetrating the system.

WEAR PREVENTION:

Omega 611 is made from the finest base oils and has exclusive Omega supplements to withstand wear and compression conditions.

PREVENTS CARBON FORMATION:

Omega 611 prevents the build-up of carbon. Carbon deposits damage the system and form heavy deposits that drain energy consumption.

PREVENTS ICE FORMATION:

Formation of ice WITHIN the system is both dangerous and undesirable. Omega 611 prevents this formation and retains a constant fluid texture.

APPLICATION:

Omega 611 can be, and is being used in most refrigerators, including the non-diluting type (ammonia).

TYPICAL DATA:

TEST	ASTM TEST METHOD	TEST RESULT
		SAE20
ISO Viscosity Grade	D-2422	68
Appearance	Visual	Amber
Density, Kg/L @ 15°C	D-1298	0.984
Viscosity, cSt @ 40°C	D-445	62
Viscosity, cSt @100°C	D-445	7.0
Viscosity Index	D-2270	55
Flash Point, COC, °C(°F)	D-92	256(493)
Pour Point, °C(°F)	D-97	-38(-36)
Moisture, PPM (Max.)	D-1744	25
Aniline Point, °C(°F)	D-611	92(198)
Dielectric Value kV (Min.)	AS-1767(1975)	25
Floc Point, °C(°F)	J-58	-55(-67)
Haze Point, °C(°F)	J-58	-48(-55)
Operating Temperature Range °C(°F)	-	-35(-31) to 138(280)

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