



The Ultimate Lubricant

28

DESCRIPTION:

Omega 28 is a totally new and exclusive Fluoroether Synthetic Grease that displays exemplary inertness to many chemicals, coupled with exceptional oxidative and thermal stability - even under arduous application environments. It will even resist hydrocarbon fuels and most solvents, while providing exceptional lubrication qualities.

EXEMPLARY STABILITY:

Omega 28 is perfect for virtually any hostile operating environment, including radiation exposure, since the advanced chemistry employed provides this in-novative Omega grease with superior resistance and the ability to withstand the harshest operating conditions including exposure and/or direct contact with:

- Nitrogen Tetroxide
- Oxygen
- Ethyl Alcohol
- Aniline
- Ammonia
- Hydrazine
- Fluorine
- Unsymmetrical Dimethylhydrazine
- Turbine Fuel
- Boiling Sulphuric Acid
- Boiling Nitric Acid
- Molten Sodium Hydroxide
- Diethylenetriamine
- up to 90% Hydrogen Peroxide

It is designed and engineered for critical and previously "impossible" lubricating conditions that conventional greases cannot tolerate, such as lubricating pipe threads for high-pressure oxygen pipes, and for seals, threads, joints and stems used for liquids, gas and strenuous vacuum service environments.

Omega 28 features such highly stable properties that thermal degradation will generally not take place until direct contact temperatures exceeding 500°F (260°C) are encountered. It provides excellent lubrication service for severe applications where chemical resistance and resistance to fuel is required, and where superior film strength needs to be maintained at high temperatures.

WIDE RANGE OF APPLICATIONS:

Omega 28 can be used for a wide range of applications which demand the highest performance lubrication, including aeronautical equipment, satellites, aircraft components, ground support equipment, etc.

Suggested applications include:

- Lubrication of mining, plastic compounding and oil-well drilling equipment.
- Lubrication of O-Rings, plastics & ceramics, couplings, instruments, valves, circuit breakers & railway switch machine bearings.
- Food Processing, Canning & Textile equipment & machinery.
- Lubrication of valves and other fittings used in gaseous, liquid oxygen and reactive chemical processing.
- Anti-Seize applications and as a releasing agent and gasket sealant.

- Lubrication of plug valves, pressure release valves and pumping equipment handling highly reactive or corrosive liquids.
- Lubrication of equipment and instruments used in high vacuum applications, cryogenic apparatus and pneumatic systems.
- Lubrication of bearings used in hot air fans in chemical drying processes and sealed roller bearings of track & chain conveyors in high temperature environments.
- Lubrication of shaft bearings in petrochemical plants that come into contact with aromatic hydrocarbons.
- Lubrication of rolling contact bearings and fan bearings used to cool solid state electronic systems including gyroscopes.
- Lubrication of fuel pump bearings pumping jet fuel.

Omega 28 is also eminently suitable for many critical applications in the Drugs & Pharmaceuticals industry, the manufacture of Computer Chips, in Oxygen Producing plants, Automotive Manufacture (where Painting & Drying Ovens and Conveyors are used), in Electroplating plants, Fertilizer Factories, in Wooden Chipboard Manufactories and as an oxygen pipe sealant in Hospitals, Clinics, Hospices, etc.

TYPICAL DATA:

TEST	ASTM TEST METHOD	TEST RESULT
Base Fluid:-		
Viscosity @ 100°F(37.8°C), cSt	D-445	500
Viscosity @ 210°F(98.9°C), cSt	D-445	43
Viscosity Index	D-2270	144
Flash Point	D-92	None
Pour Point	D-97	-20°F (-28.8°C)
Vapour Pressure	Knudsen Method	
	@ 100°F (37.8°C)	6x10 ⁻⁹ torr
	@ 500°F (260°C)	3x10 ⁻⁴ torr
Evaporation, 5-1/2hours @ 400°F (204°C)	D-972	Less that 1%
Unworked Penetration	D-217	249
Worked Penetration (60Times) @ 77°F (25°C)	D-217	265-295
Oil Separation, 24hrs @ 302°F (150°C)	D-1742	7.5%
Evaporation, 22hrs @ 302°F (150°C)	D-2595	1.1%
Neutralization Number	D-974	0.11mg KOH/g
Specific Gravity @ 25°C (77°F)	---	1.93
Copper Corrosion	D-130	2C, No corrosion
NLGI Grade	---	#2
Operating Temperature Range		-30°C to 260°C (-22°F to 500°F)
Color		Off White

CAUTIONARY NOTE:

Since Omega 28 provides superior lubricity when used as a thread sealant, the use of the torque wrench is recommended when mounting nuts on treated threads to avoid over-tightening. In addition, inhaling vapours from Omega 28 at high temperatures over 480°F (250°C) (such as when smoking) should be avoided.

When applying Omega 28 for the first time, parts to be lubricated should be dismantled and thoroughly purged (cleaned) of any existing greases or oils, using chlorinated solvents in an agitated bath and full soak as Omega 28's chemistry is incompatible with ordinary greases.