



LMG-11S[®]

Magnesium Sulfonate Corrosion Inhibitor Additive



DESCRIPTION

LMG-11S[®] is a high concentration, low contaminant turbine-quality, totally oil-soluble, magnesium fuel additive. **LMG-11S[®]** is used to passivate high temperature corrosion caused by vanadium found in crude and residual grade fuel oils. No dilution or blending is required. **LMG-11S[®]** provides a minimum of eleven percent (11%) active magnesium in a non-abrasive and ready-to-use, highly soluble form. **LMG-11S[®]** can also aid in the dispersion of asphaltenes found in fuel oils allowing better atomization of the crude and residual fuel oils.

APPLICATION

GAS TURBINES

Add **LMG-11S[®]** corrosion inhibitor directly to water washed gas turbine liquid fuels contaminated with vanadium. Since most ash-bearing fuels require sodium and potassium reduction to specification levels, the product is added after water-washing and fuel purification by electrostatic or centrifugal techniques. Add **LMG-11S[®]** corrosion inhibitor to circulated warm fuel and assure adequate mixing by magnesium analysis. Use a minimum of 27 ppm of *product* (by weight) for each ppm of vanadium present in the fuel. This will maintain the turbine manufacturer's recommended 3-to-1 magnesium to vanadium treating ratio.

DIESEL ENGINES

Add **LMG-11S[®]** corrosion inhibitor directly to the diesel engine fuels contaminated with vanadium. In some instances, these fuels are purified by fuel washing techniques, and in these cases, the product should be added after the purification steps. Normally, a dosage of 9 ppm of *product* (by weight) for each ppm of vanadium and sodium present in the fuel will inhibit vanadium corrosion of exhaust valves and reduce turbocharger fouling.

TYPICAL PROPERTIES

Magnesium, wt%	11.0 min.
Appearance	Red brown liquid
Density at 60°F (16°C)	8.25 – 8.7 lbs/gal
Spec. Grav. at 60°F (16°C)	0.98 – 1.06 150°F
Flash Point	(70 °C) min. <
Pour Point	-10°F (< -23°C)
Viscosity	
@ 100°F (38 °C)	< 10 cSt
@ 60°F (16 °C)	< 50 cSt
Compatibility with Fuel	Totally Miscible
Water	Nil Wt%

SAFETY AND HANDLING

LMG-11S[®] corrosion inhibitor is readily pumpable from unheated additive storage at temperatures above 0°F (-17 °C). It is stable in mild steel and aluminum storage tanks or in original containers over long periods of time. It is an industrial chemical and should be handled with the same precautions as used with ordinary distillates, solvents, and weak alkalis. Avoid open flame. Avoid skin and eye contact. Wash contaminated areas with soap and water.

AVAILABILITY

LMG-11S[®] corrosion inhibitor is supplied in bulk, net 275 U.S. gallon non-returnable totes (IBCs), and net 55-U.S. gallon, non-returnable drums. Shipping classification: "Compound, Crude Petroleum Treating."

Before handling, storage or use, see the Material Safety Data Sheet (MSDS) for details.

Liquid Minerals Group, Ltd. Customer Care Hotline:
+1-936-291-2424 (8 a.m. to 5 p.m. CST)
Emergency – Chemtrec 800-424-9300 (US)
703-527-3887 (Intl)

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