

# **DELTA~THERM LD™**

#### LIQUID DESICCANT FOR NATURAL GAS DEHYDRATION

## **Product Description**

DELTA~THERM liquid desiccant™ is formulated with virgin triethylene glycol and a complex proprietary blend of corrosion inhibitors for use in natural gas dehydration systems.

DELTA~THERM LD™ will provide excellent dew point depression, enhance hydrocarbon separation, and protect system metals against the corrosive effect of organic acids formed during the regeneration phase of the natural gas drying process. The use of organic and inorganic corrosion inhibitors makes this product uniquely efficient and thermally stable in natural gas dehydration systems.

The superior inhibitor formulation incorporated into every gallon of DELTA~THERM LD $^{\rm TM}$  is chemically engineered to provide greater fluid stability and longer service life. The higher reserve alkalinity of DELTA~THERM LD combined with other proprietary enhancements has proven to be highly effective at minimizing the negative effect of organic acids caused by the oxidation of triethylene glycol over time.

DELTA~THERM LD™ can be added to more conventional forms of inhibited triethylene glycol without compromising either fluid. In fact, the addition of DELTA~THERM LD will actually improve the corrosion protection of your existing glycol. Note: we recommend having the pre-existing glycol analyzed first to determine if the glycol is suitable for continued use.

"Performance products of unparalleled quality and value" sm

DELTA~THERM LD™ can also be used in air dehydration systems when humidity controlled environments are essential for the prevention of flash rusting.

#### **Technical Data:**

#### Typical composition: Delta~Therm LD

Triethylene Glycol	≥ 95
Inhibitors	≥ 4
Color	Water-white
Specific Gravity	~ 1.12 - 1.13
pH, 50% solution	~ 8.0 – 10.0
Reserve Alkalinity (new)	> 4.0

### Typical properties of Delta~Therm LD:

BP @ 760 mm Hg	~ 410 °F
Flash Point	> 300 °F
VP (mm Hg @ 400°F)	~ 70 - 75
Thermal Conductivity @ 400°F	~ 0.1 - 0.15
Specific Heat @ 400°F	~ 0.7 - 0.75
Viscosity, cP @ 68°F)	~ 49.0

~ 166

Ht of Vaporization (btu/lb@1atm)