

DLBH-500

Dehydrator, Line and Bath Heater
Glycol Additive System

PRODUCT CODE: 62080-1500

HTF ADDITIVE PACKAGES

Additives Plus specializes in the development and the production of additive packages used to make virgin, or recycled, propylene and ethylene glycol based heat transfer fluids. The use of Additives Plus Add Paks and heat transfer fluid systems in your products and customer's systems will ensure: consistent product quality, economy, ease of blending corrosion prevention, long-life dependability, minimization of laboratory time and expense. Our chemists have developed a variety of stand-alone Add Paks for: glycol based heat transfer fluids, glycol based safety hydraulic fluids, and alkylate based high-temperature fluids. We can adjust formulations to meet your specific needs for performance-enhancing additives, in both light- and heavy-duty systems.

QUALITY CONTROL

To ensure quality control and assurance, all blending is controlled under stringent standards. Each individual batch of Add Pak is rigorously tested for conformance with product and industry specifications prior to storage, packaging, or shipment. The laboratory analysis is thoroughly conducted by Additives Plus. A Certificate of Analysis for each lot is produced and is available to customers.

TECHNICAL CONTACT INFORMATION

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PRODUCT DESCRIPTION AND APPLICATIONS

DLBH-500 is an additive system for mono-, di- and tri-glycols, including diethylene and triethylene glycols, which enhances their performance in applications such as the following:

- The use of monopropylene glycol (MPG) and monoethylene glycol (MEG) as heat transfer fluids in line and bath heaters
- The use of diethylene glycol (DEG) as a heat transfer fluid in line and bath heaters
- The use of DEG as a water removal agent in natural gas dehydration systems
- The use of triethylene glycol as a water removal agent in natural gas dehydration systems

When MEG/water or MPG/water solutions are used as the heat transfer fluid media in line heaters and bath heaters for natural gas gathering and pipeline transport systems, they must be inhibited to prevent rapid corrosion of metallic materials of construction in these systems. DLBH-500 can be used in two ways to improve the level of performance of the MEG or MPG in this application:

1. It can be used to inhibit glycol/water solutions down to concentrations as low as 30% glycol by volume. This will allow you to avoid the purchase of expensive finished heat transfer fluids by buying the appropriate glycol and inhibiting it yourself. DLBH-500 can be used to inhibit glycol/water solutions using water with up to 250ppm hardness (as calcium carbonate).
2. DLBH-500 can be used to restore or boost the inhibitor levels in heat transfer fluids already in service. If you have heat transfer fluid that has been in use in line or bath heaters for one year or longer without being tested for inhibitor depletion we recommend testing the fluid. Re-inhibiting/re-fortifying your inhibitor levels with DLBH-500 will extend the effective service life of your fluid.

DEG can be used as a base for heat transfer fluids used in line and bath heaters. DEG extends the upper temperature limit at which the fluid can be used by virtue of its higher boiling point, but it can create pump motor electrical system overload problems when the system is started up after downtime during cold weather periods due to the relatively high viscosity of DEG. DLBH-500 also contains viscosity modifying ingredients to prevent thickening of DEG during periods of downtime during cold weather, saving pump motors, fuses, breaker switch resetting and start-up problems, in general. DLBH-500 also serves as an outstanding corrosion inhibitor or re-inhibitor additive package, and it extends the service life of DEG by

controlling thermal and oxidative degradation to tars and preventing “coking.”

DEG can be used as an effective water removal agent in natural gas dehydrators, but is limited to lower average operating temperatures than TEG due to its lower boiling point; however, it provides the significant advantage over TEG of a much lower tendency to absorb benzene from natural gas. Absorption of relatively high levels of benzene by TEG can make it a hazardous waste. DLBH-500 controls the thermal and oxidative degradation of DEG.

When TEG is used as a water removal agent in natural gas dehydration systems, it will thermally and oxidatively degrade over time to form corrosive glycolic acids, and gummy tars and fouling coke deposits. DLBH-500 will help retard the formation of glycolic acids, tars and carbonaceous coke to prolong its effective service life.

BLENDING INSTRUCTIONS

Charge the desired quantity of glycol to the blending tank. The glycol should be at a temperature of 45°F or higher and should have an initial pH of 7.0-9.5. Maintain this temperature of 45°F or higher throughout the blending procedure. Based on the quantity of glycol being treated, add 2.2% by volume of DLBH-500 while agitating or circulating glycol. Continue to agitate for 15-30 minutes after entire Add Pak content has been added. Store the concentrated additive system at a temperature above 50°F.

PRODUCT SPECIFICATIONS	
As concentrated DLBH-500 Additive System:	
Visual	Slightly cloudy, light amber liquid
Specific Gravity	1.145-1.160
pH	13.0-14.0
Boiling Point	210-220°F