

# LAG-120

## Acid Gelling Agent

41140-001



LIBERTY

### General Information:

LAG – 120 is a unique acid-gelling agent for low to moderate temperature wells. It is the only additive required in acid for gelation, inhibition, and in many crudes, nonemulsification.

### Physical Properties:

Density ..... 7.9 lbs/gal.  
pH (1% Solution) ..... Mildly cationic  
Solubility in Water ..... Soluble  
Solubility in Diesel ..... Partial  
Color ..... Amber to dark, clear liquid  
Odor ..... Offensive, pungent  
Flash Point: ..... 59°F

### Chemical Description:

LAG – 120 contains ethoxylated amine surfactants for acid gelation, fines suspension, and nonemulsification quaternary amine salts and acetylenic alcohols for acid inhibition, and a proprietary chemical package to maintain acid viscosity even in the presence of dissolved iron. LAG – 120 only viscosifies acidic fluids, and reverts to a residue-free, thin fluid in spent acid.

### Limitations:

LAG – 120 being a surfactant-based gelling agent, is sensitive to many of the additives commonly used in acid. Avoid the use of any additional inhibitors, NE agents, etc., without first consulting with your Liberty Pressure Pumping representative. Such agents are available, but must be properly selected to avoid sever loss of viscosity in acid gelled with the product.

### Recommended Uses:

LAG – 120 is recommended for use in any gelled acid application at lower temperatures. Viscosified acid has been shown to provide wider crack width and improved acid retardation over that from thin fluid when used in carbonate acidizing.



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### Treating Applications:

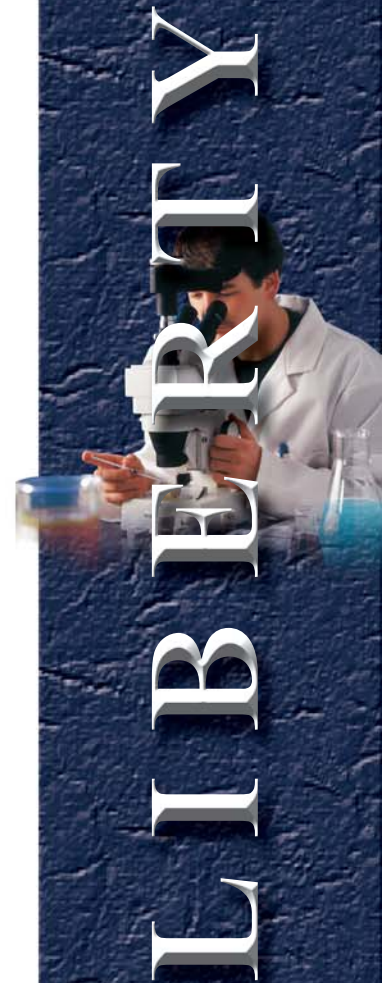
LAG – 120 is typically used at loadings between 15 and 30 gallons per thousand gallons of hydrochloric acid. The preferred method of mixing is to add LAG – 120 to the mix water prior to the addition of raw acid. Do not add other additives (except acetic acid, if desired) without consulting first with your Liberty Pressure Pumping representative.

### Packaging:

LAG – 120 is obtainable in 55-gallon poly drums, 330-gallon poly totes and bulk storage.

### DOT Information:

Flammable liquid, corrosive, n.o.s., 3, UN 2924, PG II



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