

LSI-21 Scale Inhibitor

11180-003

General Information:

LSI-21 is a water-soluble, liquid scale inhibitor used for the prevention of alkaline earth metal scale deposits of all major types. This product exhibits the “threshold effect” in aqueous solutions to prevent the formation of scale deposits.

Physical Properties:

Density 8.6 lb/gal
Flash Point 138°F
Pour Point below -10°
pH..... 4-6

Chemical Description:

LSI-21 combines an acrylate polymer with a highly effective phosphate ester. It is effective in a wide variety of oilfield waters.

Recommended Uses:

LSI-21 is recommended for inhibition of alkaline earth metal scale deposits such as calcium carbonate, calcium sulfate, and barium sulfate in:

1. Producing wells
2. Water injection and disposal systems
3. Cooling water systems
4. Steam generators, heater treaters, and other surface production equipment.

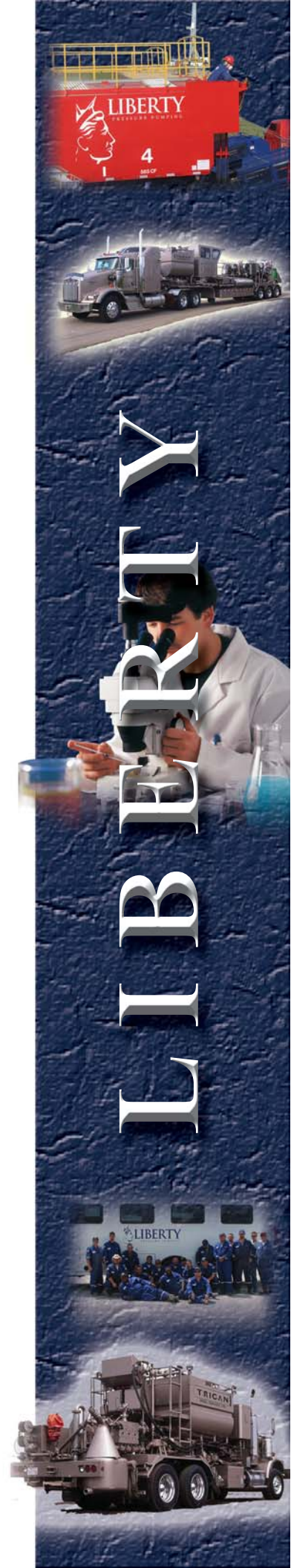
Limitations:

LSI-21 tends to be corrosive to copper, brass, or aluminum chemical injection pump parts. Injection pump parts and lines should be stainless steel or plastic. LSI-21 may be incompatible with some cationic materials. Phosphate esters are limited to temperatures of 175 degrees F.

Treating Applications:

Recommendations should be based on complete water and scale analysis prior to treatment with LSI-21. Equipment inspection and supplemental tests (membrane filter, coupons, etc.) can be made to provide additional information. These analyses should establish:

- (a) the presence of a scale-forming condition,
- (b) the type of scale being formed,



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Treating Applications: (cont'd)

- (c) the severity of the scale problem,
- (d) the temperatures at which the scale is most likely to form, and
- (e) the most effective place in the system to inject the treating chemical.

The severity of the scale problem and the economics of treating the system will, in most cases, dictate the rate and method of treatment. Continuous treatment with LSI-21 is recommended in all cases for maximum results. The average treating rate for LSI-21 is 5-25 ppm. Lower or higher rates may be used as the system requires.

Packaging:

LSI-21 is obtainable in 55-gallon poly drums or poly totes

DOT Information:

FLAMMABLE LIQUID, N.O.S., 3, UN 1993, PG III



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Liberty Pressure Pumping, L.P., 1517 Centre Place Drive #320, Denton, TX 76205, 940-243-1120

