

LIFESPAN 3331 Polymer Inhibitor

Reduce fouling due to polymer formation in refinery units

Applications

- Downstream refining
- Reactive feed streams in intermediate storage
- Hot rundown feeds
- Hydrotreated streams for storage and transport
- Control polymer formation in refinery and petrochemical process reactive streams

Features and Benefits

- Inhibits gums and polymer formation
 - Reduces free radical gums formation from olefins and diolefins
 - Decreases cleaning and other maintenance costs associated with fouling
 - Reduces excess heater firing by controlling feed exchanger fouling
 - Improves long term storage stability
- Inhibits condensation reactions
 - Reduces fouling by condensation reactions by inhibiting peroxide induced carbonyl formation
- Sweetens feed streams
 - Reduces fouling caused by mercaptans gums formation
- Concentrated formula
 - Permits lower dosage rates
 - Improves safety by reducing chemical handling and transfers

LIFESPAN™ 3331 Polymer Inhibitor reduces fouling in refinery units, such as feed preheat exchanges, by controlling the formation of gums and polymer in various naphtha, distillate and gas oil streams containing reactive components.

The additive is a multicomponent formulation with strong antioxidant characteristics to control the formation of oxygen-centered free radical polymers. The product will control heat induced polymer formation in the process systems. LIFESPAN 3331 can be injected into the reactive fluid rundown lines to storage tanks upstream of unit feedpumps; and it can be injected directly to hot rundown lines containing reactive feeds, or directly into the unit combined feed stream. The additive can also be an effective storage and transport stabilizer.

Proprietary polymer testing and stream characterization can evaluate additive effectiveness.

Contact Baker Hughes Downstream Technical Support for application details and recommendations.

Safety and handling

Before handling, storage or use, review the Safety Data Sheet (SDS) for guidance.

Baker Hughes / Baker Petrolite 24-Hour Emergency Hotline:

1-800-424-9300 (CHEMTREC) U.S.A.

1-613-996-6666 (CANUTEC) Canada

Materials Compatibility

Suitable:

Metals: Admiralty brass, aluminum, copper, mild steel, 304 stainless steel, 316 stainless steel

Plastics: Fiberglass, polyethylene HD, polypropylene HD

Elastomers: TEFLON®, VITON®

Not Suitable:

Plastics: Polyurethane, PVC

Elastomers: Buna N, Neoprene, Ethylene / propylene copolymer, HYPALON®

Materials suitability is based on analysis of test results obtained under specified laboratory conditions. All materials selection should be based on actual application. Testing results for materials will be made available upon request.

Typical properties

Specific gravity at 60°F (16°C)	0.95
Density at 60 °F (16 °C)	7.9 lbm/US gal (946.6 kg/m³)
Flash point, SFCC	200 °F (93 °C)
Pour point, ASTM D-97	<-35 °F (< -37 °C)
Crystallization Temperature	7 °F (-14 °C)
Viscosity, ASTM D-445	
at 60 °F (16 °C)	56 cSt
At 30 °F (-1 °C)	315 cSt
At 0 °F (-18 °C)	4940 cSt