

# FORSA RE30535PAO paraffin inhibitor

## Minimizes paraffin failures

### Applications

- Gas Lift
- Conventional Oil

### Features and benefits

- Gas lift approved product
  - Tested and qualified for gas-lift application
- High performing paraffin inhibitor
  - Minimizes failure caused by paraffin
- Lowers oil pour point
  - Performs effectively at colder temperatures

FORSA™ RE30535PAO paraffin inhibitor, a liquid, oil-soluble chemical formulation, is the gas-lift approved version of FORSAT™ PAO3055 paraffin inhibitor. RE30535PAO controls paraffin deposition, reduces pour point, and improves low temperature flow properties.

This product has undergone extensive testing for use in gas lift application. In a three-step process, the paraffin inhibitors subjected to solvent stripping, thermal stability testing, and fluid rheology testing to ensure that the product remains fluid and homogeneous when applied in the gas stream.

RE30535PAO provides better pumpability and reduced flow resistance for crude oils in production and pipeline operations. It inhibits congealing and reduces flow resistance, and eventual plugging of flowlines and pipelines caused by temperature changes. Injecting this inhibitor at the wellhead or downhole can facilitate production of high pour point crude oils. With responsive crudes, pour point reduction of 20°F to 60°F (11.1°C–33.3°C) is possible.

This product is also very effective in facilitating the transportation and handling of waxy crude oils. A fluid with improved flow characteristics, near to below its natural pour point, reduces transportation problems. Using Baker Hughes RE30535PAO paraffin inhibitor results in lower energy use, reduced requirements for pumping equipment, and less cleanout time and carry-back for transport vessels.

RE30535PAO paraffin inhibitor can be added to crude oils at any point in the

production system. However, maximum efficiency is obtained when the addition is made to warm or hot crude oil. Because wax crystals grow in crude oils as their temperature decreases, the addition of cold flow improver to cold crude oils may result in poor treating efficiency. Continuous injection into crude oil where the temperature is at least 20°F (11.1°C) above the cloud point is preferred.

The earlier the additive is applied in the produced fluids, the better the results will be in preventing paraffin. Significant reductions in the congealing temperatures of crude oil can be obtained by adding 100 to 2,000 ppm of the product, depending on the amount of paraffin in the crude oil.

### Typical properties

General appearance	Amber liquid
Specific gravity at 60°F (16°C)	0.833
Typical density at 60°F (16°C)	76.93 lbm/US gal (830.397 kg/m <sup>3</sup> )
Flash point, SFCC	< 32°F (< 0°C)
Pour point, ASTM D-97	25°F (-6.7°C)
Long-Term Low Temperature Use Limit	30°F (-1.1°C)
Viscosity, ASTM D-455	
At 60°F (16°C)	1.3 cP
At 30°F (-1°C)	1.8 cP

## Materials compatibility

### Suitable

Metals:	Admiralty brass, copper, mild steel, aluminum, 304 stainless steel, 316 stainless steel
Plastics:	Polyethylene HD, Polypropylene HD, TEFLON®
Elastomers:	VITON®

*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 on request.*

### Safety and handling

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

### Not suitable

Plastics:	Polyethylene linear, PVC
Elastomers:	Buna N, CSM, EPDM, Neoprene