

EXCALIBUR 7771K additive

Remove metals and tramp amines during desalting

Applications

- Refinery processes
- Crude oil desalting

Features and Benefits

- Proven contaminant removal capabilities
 - Removes tramp amines to reduce overhead corrosion issues due to amine salting
 - Enables flexibility in crude operations by allowing tower top salting temps to be manipulated
 - Minimizes fouling issues downstream in hot preheat train
 - Allow continued production of higher value coke
 - Minimizes catalyst deactivation in crude unit residual streams
- Formulated with corrosion inhibitor
 - Minimizes corrosion in chemical feed and injection lines
- Efficient destabilization of desalter emulsions
 - Helps maintain optimal desalter operation
 - Allows processing of lower cost opportunity crudes
 - Reduces or eliminated oil under carry in the brine
- Low product toxicity
 - Des does not impact wastewater treatment plant operation and performance

The **EXCALIBUR™ 7771K additive** is a highly effective contaminant removal additive that allows refiners to process opportunity crude oils high in tramp amines or in calcium naphthenates. It is designed to minimize downstream corrosion and fouling without the risk of scaling due to salt precipitation. It is used in conjunction with any desalting program with minimal impact on crude or downstream unit operations, performance, or product quality.

The product lowers the pH of desalter wash water. Desalter pH has a direct relationship to amine partitioning. As the pH is reduced, more amines will transfer to the water phase as opposed to remaining in the crude and flowing toward downstream units such as the tower overhead. The product will also facilitate the removal of metals such as naphthenate associated calcium. The level of pH targeted will dictate the amount of tramp amines or calcium removed from the crude and transferred to the desalter brine.

This additive should be fed with a positive displacement pump and injected into the desalter wash water line using an in-line mixer and alloy injection quill.

Please consult your Baker Hughes representative for information about product dosage, injection, and control. Best practices have been established to ensure optimal performance.

Typical properties

General appearance	Clear, Amber liquid
Specific gravity at 60°F (16°C)	1.16
Typical density at 60°F (16°C)	9.7 lbm/US gal (1,162.32 kg/m³)
Flash point, SFCC	>212°F (100°C)
Pour point,	<-4°F (<20°C)
Viscosity kinematic at (40°C)	1 to 10 cSt

Materials compatibility

Suitable

Metals:	304 stainless steel, 314 stainless steel, Admiralty brass
Plastics:	polypropylene HD, polyethylene HD, linear polyethylene, TEFLON®, PVC
Elastomers:	VITON, EPDM, HYPALON®

Not suitable

Metals:	Aluminum, mild steel, copper
Elastomers:	Buna N, neoprene,

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).