

# BPR 41817 FCC metal passivator

## Effectively control the impact of nickel in FCC feed

### Applications

- Fluidized catalytic cracking units
  - Gas oil crackers
  - Resid crackers

### Features and Benefits

- Reduces the impact of nickel in FCC feed
  - Reduces excess hydrogen production
  - Lower wet gas compressor load
  - Reduces excess coke production
  - Lower loading of regenerator air blowers
  - Improved gasoline yield
  - Higher C<sub>4</sub> yield
- Organ-metallic formulation
- Reduce catalyst consumption
- Increase refinery flexibility
- Increase feedstock flexibility

Baker Hughes **BPR 41817 FCC metal passivator** is an oil soluble organo-metallic antimony compound designed to reduce the impact of nickel in FCC feed. Use of this product allows the catalytic cracking unit to tolerate higher concentrations of contaminant nickel while minimizing the adverse effect of nickel on unit capacity and catalyst usage.

BPR 41817 should be injected into the FCC feed prior to catalyst addition to reduce the adverse effects of nickel. Nickel in zeolite catalyst acts as a strong dehydrogenation catalyst and produces excess hydrogen and coke in the catalyst. The product reacts with fresh nickel as it is cracked out of the feed reducing dehydrogenation.

Effective dose rates are dependent on the amount of nickel in the feed. Optimization is done by observing the amount of hydrogen being produced. This product may be injected without a carrier; if a carrier is desired for good mixing, either HCO or FCC feed are preferred. Avoid using LCO as a carrier as it typically contains water and may cause plugging of injection quills. Contact Baker Hughes technical services for application details.

### Typical properties

Appearance	Dark brown liquid
Specific gravity at 60°F (15.6°C)	1.27
Typical density at 60°F (15.6°C)	9.6 lbs/US gal (1150.3 kg/m <sup>3</sup> )
Flash point, SFCC. ASTM D-3828	>200°F (>93.4°C)
Pour Point	5°F (-15°C)
Viscosity at	
100°F (°C)	150 cP
60°F (15.6°C)	500 cP
40°F (°C)	1000 cp

### Materials compatibility

#### Suitable:

Metals:	304 stainless steel, 316 stainless steel
Plastics:	HD polyethylene, HD polypropylene, Linear polyethylene, PVC, TEFLON®
Elastomers:	VITON®

#### Not Suitable:

Metals:	Admiralty brass, aluminum, copper, mild steel
Elastomers:	Buna N, neoprene, HYPALON®, EDPM

*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.*

#### Suitability criteria:

Metals:	< 1.0 MPY loss
Plastics:	<10% weight change
Elastomers:	<10% weight change

### Safety and handling

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

**This product is water intolerant and will form sludge upon contact with water in storage.**