

# ALCHEMIA 1150 extraction additive

## Convert and extract reactive sulfur from light hydrocarbons

### Applications

- Finished products such as gasoline, diesel, jet fuel and LPG
- Intermediate products and blend stocks

### Features and Benefits

- Efficient reaction/extraction solvent for removing challenging sulfur compounds from light hydrocarbons
  - More efficient than traditional scavengers
  - Potentially lower cost option to meet regulatory and commercial sulfur specifications
  - Avoid reduction of product value or lower octane levels in meeting sulfur requirements
  - Can debottleneck downstream processing
- Utilizes a specialized synergist
  - Able to remove more resistant sulfur compounds than other chemistries
- A component of the ALCHEMIA Contaminant Extraction Services
  - Reaction products are extracted from the treated hydrocarbon
  - Permits flexibility in treatment volumes
  - Customization of process to fit requirements

ALCHEMIA™ 1150 extraction additive from Baker Hughes, is a proprietary reaction extraction solvent utilized as a chemical component in a proprietary contaminant extraction services process from Baker Hughes.

ALCHEMIA 1150 extraction additive is effective to convert reactive sulfur compounds into lower reactive species that are then extracted into the reaction/extraction additive.

Reaction/extraction processes using ALCHEMIA 1150 extraction additive may be more attractive than traditional scavenger programs, as the ALCHEMIA process is designed to physically remove the contaminant sulfur from the hydrocarbon being treated while simultaneously not leaving any residual reactant in the treated hydrocarbon.

ALCHEMIA 1150 extraction additive employs a specialized synergist to convert more challenging sulfur species than other chemistries. ALCHEMIA 1150 extraction additive is intended to be only applied as a component of the Baker Hughes ALCHEMIA contaminant extraction services program. Alchemia 1150 extraction additive is not intended to be applied as standalone additive.

Your Baker Hughes representative can provide additional guidance and assistance to determine the optimum application and monitoring program to ensure continuing success.

### Typical properties

<b>Specific gravity at 60°F (16°C)</b>	1.23
<b>Typical density at 60°F (16°C)</b>	10.2 lbm/US gal (1,231kg/m <sup>3</sup> )
<b>Flash point</b>	N/A
<b>Pour point</b>	14°F (-10°C)
<b>Viscosity, D445 at 68°F (20°C)</b>	55 cSt

### Materials compatibility

#### Suitable

Metals:	Mild steel, copper, admiralty brass, 304 stainless steel, 316 stainless steel
Plastics:	Polypropylene HD, polyethylene HD, polyethylene linear, PVC, nylon
Elastomers:	TEFLON®, HYPALON®, neoprene, Buna N, EPDM

### **Not suitable**

Metals: Aluminum

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.*

*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 sensitive to water contact in storage tanks and will form a gel. Once in the operating unit, the product will partition to the oil phase and low concentrations of water are non-problematic.