

# CARBO-MUL 4166 emulsifier

Delivers emulsion stability and oil wetting in diesel oil-based drilling fluids

## Applications

- Invert emulsion drilling fluids
  - Diesel-based systems
- Conventional and unconventional drilling applications up to 350°F (177°C)

## Features and benefits

- Provides system stability across a range of densities, oil/water ratios, and internal phase salinities
- Eliminates water in filtrate
- Has minimal effect on plastic viscosity
- Reduces surface tension of the internal phase fluid
- High flash point
  - Not classified as flammable liquid

The CARBO-MUL™ 4166 from Baker Hughes is a highly effective emulsifier and wetting agent for use in diesel-based drilling fluid systems.

CARBO-MUL 4166 emulsifier can be used to reliably build emulsion stability while also reducing high-pressure/high-temperature (HP/HT) fluid loss. This product adheres to mineral surfaces, reducing interfacial surface energy and rendering oil-wet barite, other weighting agents, and drilled solids.

## Recommended treatment

Typical concentration of 1.0–2.0 gal/bbl (23.8 to 47.6 L/m<sup>3</sup>) of CARBO-MUL 4166 is recommended when used as an emulsifier. Treatment levels vary depending on the bottomhole temperature, density, and solids content. Pilot testing should be conducted to determine the optimal concentrations of CARBO-MUL 4166 emulsifier.

Contact your Baker Hughes representative for additional information.

## Environmental information

For information concerning environmental regulations applicable to this product, contact the Health, Safety, and Environmental department of Baker Hughes.

## Shipping

Transportation of CARBO-MUL 4166 is not restricted by either international or United States regulatory agencies.

## Safe handling recommendations

Take normal precautions when handling and wear appropriate personal protective equipment. See Safety Data Sheets (SDS) prior to use.

## Packaging

The CARBO-MUL 4166 is packaged in 55-gal drums.

Typical properties	
Appearance	Dark amber liquid
Specific gravity	0.92
Flash point	177.8°F (81°C)