ONE-MUL
Liquid emulsifier package

APPLICATIONS
■ Primary emulsifier
■ Secondary wetting agent
■ Filtration control

BENEFITS
■ Improves emulsion stability
■ Reduces gel strength
■ Enhances thermal stability and contamination resistance
■ Maintains HPHT filtration control
■ Minimizes dispersion tendencies of reactive clay solids

FEATURES
■ Effectiveness in the presence of contaminants over a wide range of densities and temperatures
■ Rheological profile that aids in preventing barite sag
■ Low impact on geochemical data and interpretations
■ Temperature stability to >350 degF [>175 degC]

The ONE-MUL® liquid emulsifier package provides excellent emulsion stability, filtration control, temperature stability, and preferential wetting of solids by its continuous phase. The package can be used as the emulsifier in various invert-emulsion systems, including WARP DRY® high-density colloidal suspension technology and the RHELIANT PLUS® organophilic, thermally stable, flat-rheology invert-emulsion drilling fluid system. When using the ONE-MUL package, wetting or secondary emulsifiers are not required.

Depending on the required system properties and other system components, initial system formulations typically require 8 to 10 lbm/bbl [22.8 to 28.5 kg/m³] of the ONE-MUL package. Daily treatments are typically in the range of 0.1 to 1 lbm/bbl [0.3 to 3 kg/m³]. For high-temperature (>300 degF [150 degC]) applications, initial system formulations require 8.75 to 14.0 lbm/bbl [25 to 40 kg/m³].

### Typical Physical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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<tbody>
<tr>
<td>Physical appearance</td>
<td>Amber liquid</td>
</tr>
<tr>
<td>Relative density</td>
<td>0.9–1.0</td>
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<tr>
<td>Flash point</td>
<td>&gt;212 degF [&gt;100 degC]</td>
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**Toxicity and handling**

Handle as an industrial chemical, wear personal protective equipment, and observe the precautions described in the material safety datasheet (MSDS). The harmonized offshore chemical notification format (HOCNF) is available in the NEMS Chemicals® management tool and database. Bioassay information is available upon request.

**Packaging and storage**

The ONE-MUL package is contained in 55-galUS [108-L] drums and in 164-galUS [1,000-L] totes. This package should be stored away from heat and ignition sources. The container must be kept closed at all times and away from heat, sparks, and flames, and other incompatibles. Follow safe warehousing practices regarding palletizing, banding, shrink-wrapping, or stacking.