



METSS DHL-BT

BRINE-TOLERANT DOWNHOLE LUBRICANT

METSS DHL-BT is a high-performance lubricant that has been specifically formulated to provide superior downhole drilling performance in high brine environments.

The superior performance of METSS DHL-BT allows it to be used at fractional amounts compared to other products, reducing the cost of wellhead operations and supporting logistics.

Typical Physical Properties	
Appearance	Light Amber Liquid
Viscosity (20 °C)	7.0 mm ² /s (cSt)
Specific Gravity	0.89 g/cm ³
Flash Point	> 350 °F / 177 °C
Pour Point	10 °F / -12 °C

METSS DHL-BT is formulated using renewable materials that are sustainable and safe for the environment. This engineered product readily mixes with high brine solutions to form a stable, low foam, lubricating emulsion that can be used 24 to 48 hours after mixing. Lower use rates also reduce the potential for antagonistic interactions with other oilfield chemicals. However no adverse effects are noted with brine solutions at higher concentration levels.

METSS DHL-BT Brine Compatibility¹

Brine	Conc. (ppg)	Initial Emulsion	Foaming Tendency	Emulsion Stability	Mineral Oil Addition	
					Oil Emulsion	Precipitation
NaCl	10.04	Very Opaque	Slight	Very Good	Good	None
CaCl ₂	9.60	Very Opaque	Slight	Excellent	Excellent	None
CaBr ₂	11.00	Opaque	Min	Very Good	Very Good	None
KCl	8.87	Very Opaque	Slight	Excellent	Excellent	None

¹ METSS DHL-BT mixed with brine under high shear at 5% concentration; pH adjusted to 10.5; observed at 0 and 30 min; 0.4% mineral oil blended and observed at 0 and 30 min.