



# E-500A Lubricant

Drilling Specialties™ Company E-500A lubricant is designed to impart lubricity to metal-on-rock and metal-on-metal surfaces resulting in reduced friction and drag for the demanding environment faced in vertical and horizontal wellbores.

E-500A lubricant is offered as a private label product.

## Advantages

- Conventional treatments typically only require one to four percent of this liquid product
- Can be applied in sweeps
- Effective in both fresh water and brines
- Minimal effects on rheological properties
- High affinity for metal and geological surfaces
- Compatible with coiled tubing additives such as friction reducers
- Is a stand-alone product
- Readily available for private labeling

### Benefit

Extremely cost efficient liquid lubricant for drilling applications. Total well costs are often lower as a result of higher product efficiency, lowered torque and less rig time.

### Mud Types:

All known fresh water and brine formulations for both drilling fluids and coiled tubing operations.

### Mixing Requirements

E-500A lubricant can be mixed through a mud hopper or may be added directly to a well-agitated pit.

### Handling

For specific instruction on handling, please refer to the SDS.

### Packaging

E-500A Lubricant is packaged in 275 gallon non-returnable totes and 55 gallon drums.

Bakken Field Brine					
	150 lb/in <sup>2</sup>	250 lb/in <sup>2</sup>	350 lb/in <sup>2</sup>	450 lb/in <sup>2</sup>	550 lb/in <sup>2</sup>
Bakken Brine	18.6	32.4	46.1	61.3	Overload
Brine + Competitor A (3%)	1.2	15.5	26.8	34.4	44.4
Brine + E-500A (3%)	6.9	18	27.2	38.8	48.2

9.2 ppg Permian Field Brine					
	150 lb/in <sup>2</sup>	250 lb/in <sup>2</sup>	350 lb/in <sup>2</sup>	450 lb/in <sup>2</sup>	550 lb/in <sup>2</sup>
Permian Brine	25.9	57.6	Overload		
Brine + E-500A (1%)	1.7	2.7	5	7.9	12.6
Brine + E-500A (2%)	1.1	2.2	4.2	9.9	16.5
Brine + Competitor B (2%)	3	4.1	7.1	11.3	22.2

9.5 ppg Water Based Mud					
	150 lb/in <sup>2</sup>	250 lb/in <sup>2</sup>	350 lb/in <sup>2</sup>	450 lb/in <sup>2</sup>	550 lb/in <sup>2</sup>
Water Based Mud	31.4	55.1	Overload		
WBM + E-500A (2%)	25.3	33.6	41.5	48.6	58.6
WBM+ E-500A (4%)	26.6	22	18	24.3	29.1

Before using this product, the user is advised and cautioned to make its own determination and assessment of the safety and suitability of the product for the specific use in question and is further advised against relying on the information contained herein as it may relate to any specific use or application. It is the ultimate responsibility of the user to ensure that the product is suited and the information is applicable to the user's specific application. Drilling Specialties Company does not make, and expressly disclaims, all warranties, including warranties of merchantability or fitness for a particular purpose, regardless of whether oral or written, express or implied, or allegedly arising from any usage of any trade or from any course of dealing in connection with the use of the information contained herein or the product itself. The user expressly assumes all risk and liability, whether based in contract, tort or otherwise, in connection with the use of the information contained herein or the product itself. Further, information contained herein is given without reference to any intellectual property issues, as well as federal, state or local laws which may be encountered in the use thereof. Such questions should be investigated by the user.