



# DirectDrill™ Extender

DirectDrill™ Extender is a supplemental co-polymer designed to work in conjunction with DirectDrill™ Emulsifier. New to the portfolio, DirectDrill™ Extender provides emulsion stability in direct emulsion muds during both static and dynamic conditions, and, is useful across a wide range of diesel ratios.

DirectDrill™ Extender facilitates easy formation of the direct emulsion during critical initial stages of fluid preparation. In addition, it provides suspension capabilities for efficient hole cleaning/cuttings transport and contributes to both HTHP and API Fluid Loss control. DirectDrill™ Extender, in combination with other Drilling Specialties Company additives, has the potential to tolerate temperatures up to 300°F.

## Advantages

- Stabilizes Direct Emulsion in extended static conditions
- Provides suspension characteristics and rheology control
- Compatible with monovalent Saturated brines
- Provides shale inhibition and stabilization
- Provides HTHP and API Fluid Loss Control
- Suitable for use in varying aqueous solutions

### Mud Types

Direct Emulsion: Diesel Ratio up to 65%

### Mixing Requirements

Mix through a mud hopper

### Handling

For specific instruction on handling, refer to the SDS

### Packaging

50-pound, multiwall paper sacks, 40 sacks to the pallet.

### Concentration

0.75-1.0 pounds per barrel at varying Brine Diesel ratio

Sample	Brine: Diesel Ratio	ppg	NaCl %	DirectDrill™	DirectDrill™ Extender
A	60:40	8.49	24	6	0.75
B	70:30	8.79	24	6	0.85
C	80:20	9.13	24	4	1
D	90:10	9.49	24	4	1

Table 1-2: DirectDrill™ Extender rheology profile and associated API fluid loss at varying concentrations and BDR.

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.

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	Sample A	Sample B	Sample C	Sample D
600 rpm	77	52	36	21
300 rpm	55	35	25	15
200 rpm	44	28	20	12
100 rpm	31	19	14	8
6 rpm	9	5	4	3
3 rpm	7	4	3	2
Plastic Viscosity (PV)	<b>22</b>	<b>17</b>	<b>11</b>	<b>6</b>
Yield Point (YP)	<b>33</b>	<b>18</b>	<b>14</b>	<b>9</b>
10 sec Gel	7	4	4	2
10 min Gel	11	8	4	2
API Fluid loss	1.4	1.5	2	2.2

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