

DS 20L

DS 20L LIQUID RHEOLOGICAL PROFILE MODIFIER

TYPICAL RANGE OF USE

• TEMPERATURE: BHCT > 60°F (16°C)

CONCENTRATION: 0.03 – 0.33 US GALLONS / 94 LB. SACK
DENSITY: 12 - 20 LB.'S / US GALLON (1.44 – 2.4 g/cm³)

PHYSICAL PROPERTIES

- 40 wt. % ACTIVE SOLUTION OF DIACEL RPM
- 0.022 US GALLON / 94 LB. SACK = 0.1% BWOC
- LIGHT TAN LIQUID
- SPECIFIC GRAVITY = 1.23 g / cm³

APPLICATION AREA'S

- ALL API CLASSES OF CEMENT
- FRESH WATER, SALT WATER, OR SEA WATER SLURRIES PURPOSE

<u>DS 20L</u> Liquid is a liquid cement dispersant that is typically added to the mixing water prior to preparation of the cement slurry. <u>DS 20L</u> Liquid is used for the purpose of modifying the rheology of a cement slurry. <u>DS 20L</u> Liquid may be used to promote turbulent flow at a reduced flow rate as compared to neat cement slurries. <u>DS 20L</u> Liquid allows the mixing of densified slurries and reduces the concentration of weighting agents required for weighted slurries. <u>Diacel RPM Liquid</u> is particularly beneficial when used with fluid loss control polymers. The addition of <u>DS 20L</u> Liquid will typically reduce the concentration of fluid loss agent required to obtain a particular fluid loss control value, resulting in improved economy.

| EFFECTS OF <u>DS 20L</u> LIQUID ON RHEOLOGY | | | | | | | | | |
|--|----------|-------------------------------------|-----|-----|-----|-----|-----|-------|-----------|
| Typical API Class H + Fresh Water @ 16.4 lb.'s / US gal. (1.97 g/cm ³) | | | | | | | | | |
| DS 20L | Test | Fann 35 Dial Degrees, R1B1, SF = 1X | | | | | | | |
| Gal./sac | Temp. | 600 | 300 | 200 | 100 | 6 | 3 | PV | YP |
| k | °F (°C) | rpm | rpm | rpm | rpm | rpm | rpm | сP | Lbf/100ft |
| 0 | 80 (17) | 240 | 166 | 136 | 113 | 35 | 26 | 79.5 | 86.5 |
| 0 | 150 (66) | 227 | 191 | 162 | 122 | 38 | 30 | 103.5 | 87.5 |
| 0.06 | 80 (17) | 82 | 37 | 24 | 13 | 3 | 3 | 36 | 1 |
| 0.06 | 150 (66) | 67 | 29 | 19 | 12 | 6 | 5 | 25.5 | 3.5 |
| 0.12 | 80 (17) | 74 | 27 | 20 | 10 | 2 | 2 | 25.5 | 1.5 |
| 0.12 | 150 (66) | 53 | 21 | 13 | 9 | 2 | 1 | 18 | 0 |
| 0.17 | 80 (17) | 72 | 26 | 17 | 8 | 1 | 1 | 27 | 0 |
| 0.17 | 150 (66) | 47 | 19 | 11 | 7 | 1 | 1 | 18 | 0 |
| 0.23 | 80 (17) | 59 | 22 | 16 | 8 | 1 | 1 | 21 | 0 |
| 0.23 | 150 (66) | 40 | 17 | 10 | 5 | 1 | 1 | 18 | 0 |

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