RheoMinerals **RHEOPOUR** is a patent pending polymer/copolymer blend used as a rheological additive in oil-based drilling fluids. RHEOPOUR suspends drill cuttings and weighting materials by increasing low shear viscosity with minimal effect upon apparent viscosity. RHEOPOUR activates at lower downhole temperatures, continuing to develop as downhole temperatures increase beyond 350°F.

GENERAL DESCRIPTION

RheoMinerals

RHEOPOUR is a polymeric viscosifier used in Oil and Synthetic based drilling fluids (OBM & SBM), both invert and 100% oil. **RHEOPOUR**'s proprietary technology features beneficial low equivalent circulating densities (ECDs) with concentrations as low as 1ppb. **RHEOPOUR** improves anti-settling and downhole sag due to its high gel strengths and high low shear Brookfield viscosities.

FEATURES AND BENEFITS

- Provides excellent performance in low temperature environments
- · Accelerated yield development and high gel strengths
- Improves HTHP Fluid Loss
- Improves Electronic Stability (ES)
- Provides improved rate of penetration through enhanced hole cleaning
- Low pour point with high flash point

PHYSICAL PROPERTIES AND LIMITATIONS

Appearance/Form	Yellow, free flowing liquid
Specific gravity	0.885 g/cm ³
Flash Point	290°F
Pour Point	6°F
Temperature	400°F (204.4°C) Maximum

APPLICATIONS

RHEOPOUR is recommended for use in fluids where bottom hole temperatures do not exceed 400°F (204.4°C). Applicable base oils include: US diesel, mineral oils, modified vegetable oils, Distillate 822, Cutter D, olefins and various other synthetics. Please refer to the Safety Data Sheet for more information on safe handling.

Recommended concentrations are 0.5 to 2 lb/bbl (1.43 to 5.7 kg/m³). Pilot testing is recommended to determine actual concentrations of **RHEOPOUR** before use in the field. RHEOPOUR is fully compatible with organoclay rheological additives. Some very slight syneresis may occur upon prolonged storage. RHEOPOUR is fully pourable/pumpable, with low toxicity and low flammability.

PACKAGING

RHEOPOUR is packaged in 55 gal drums or IBC totes.



TECHNICAL DATA

Sample Formulation: 12.0 lb/gal (1.44 g/cm³) 80:20 Diesel Base Field Mud

Field Mud, g	378
Dilution 80:20, g	126
Primary Emulsifier, g	0.5
Secondary Emulsifier, g	0.5
RHEOPOUR, g	0

	15 Min	O/N 250 F
Electrical Stability, volts	476	321
θ 600 / θ 300 at 120°F (49°C)	79 / 45	69 /37
θ6/θ3	4 / 4	3/3
Plastic Viscosity, cP	34	32
Yield Point, lb/100 ft ²	11	5
10-sec Gel, lb/100 ft ²	4	3
10-min Gel, lb/100 ft ²	5	4
0.5 rpm Brookfield, cPs	6320	4640

Sample Formulation: 12.0 lb/gal (1.44 g/cm³) 80:20 Diesel Base Field Mud

Field Mud, g	378
Dilution 80:20, g	126
Primary Emulsifier, g	0.5
Secondary Emulsifier, g	0.5
RHEOPOUR, g	1

	15 Min	O/N 250 F
Electrical Stability, volts	494	350
θ 600 / θ 300 at 120°F (49°C)	84 / 50	78 /44
θ6/θ3	7/6	6/6
Plastic Viscosity, cP	34	34
Yield Point, lb/100 ft ²	16	10
10-sec Gel, lb/100 ft ²	6	6
10-min Gel, lb/100 ft²	7	7
0.5 rpm Brookfield, cPs	11040	15840

Sample Formulation: 12.0 lb/gal (1.44 g/cm³) 80:20 Diesel Base Field Mud

Field Mud, g	378
Dilution 80:20, g	126
Primary Emulsifier, g	0.5
Secondary Emulsifier, g	0.5
RHEOPOUR, g	2

	15 Min	O/N 250 F
Electrical Stability, volts	484	369
θ 600 / θ 300 at 120°F (49°C)	86 / 53	86 /51
θ6/θ3	8/7	11 / 10
Plastic Viscosity, cP	33	35
Yield Point, lb/100 ft ²	20	16
10-sec Gel, lb/100 ft ²	8	12
10-min Gel, lb/100 ft ²	10	13
0.5 rpm Brookfield, cPs	17520	31760



12.0 lb/gal 80:20 Diesel Based Field Mud – RHEOPOUR 0g, RHEOPOUR 1g, RHEOPOUR 2g



