

Form-A-Block

FORM-A-BLOK* high-performance, high-strength additive is a single-sack proprietary blend designed for wellbore strengthening applications and a wide variety of lost circulation scenarios, including, but not limited to, fractures and matrix permeability.

This product is applied in the form of a squeeze pill which, depending on the application, de-waters or de-oils rapidly to form a high shear-strength plug.

Typical Physical Properties

Physical appearance	Grey powder
Specific gravity	1.98
Odour	Odorless or non-characteristic odour

Applications

FORM-A-BLOK additive can be used in water-based or non-aqueous drilling fluids (NAF) for wellbore strengthening applications and to cure losses extending from partial to a wide range of severe lost circulation scenarios, at temperatures up to at least 177° C (350° F).

FORM-A-BLOK product is designed to be used for:

- Wellbore strengthening applications
- Curing partial to wide ranging severe loss situations
- Open hole remedial and/or preventive lost circulation squeeze
- Improving casing shoe integrity
- Cased-hole squeeze for sealing perforations and casing leaks

The recommended concentration of FORM-A-BLOK additive is 114 kg/m³ (40 lb/bbl), for fluid densities up to 16 lb/gal (1.92 s.g.) in freshwater, seawater or base oil/synthetic (NAF) systems. Fluid densities of 16 lb/gal or higher require less FORM-A-BLOK; 86 kg/m³ (30 lb/bbl) for water-based pills and 57 kg/m³ (20 lb/bbl) for NAF-based pills. While FORM-A-BLOK additive can be mixed with oil or synthetic base fluids, mixing a water-based pill will provide the maximum strength. The slurry can be weighted with barite, calcium carbonate or heavy brine. It is recommended to continuously agitate the pill until pumped and to pull pump screens prior to pumping.

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Density, lb/gal (s.g.)	Fresh-water, bbl	Form-A-Blok, lb/bbl	M-I Bar*, lb/bbl
9 (1.08)	0.94	40	11
10 (1.20)	0.90	40	66
12 (1.44)	0.82	40	176
14 (1.68)	0.75	40	286
16 (1.92)	0.67	30	396
18 (2.16)	0.59	30	506

Density, lb/gal (s.g.)	NAF, bbl (s.g.) 0.8 l	Form-A-Blok, lb/bbl	M-I Bar, lb/bbl
8 (0.96)	0.91	40	40
10 (1.20)	0.84	40	144
12 (1.44)	0.77	40	247
14 (1.68)	0.70	40	351
16 (1.92)	0.65	20	455
18 (2.16)	0.57	20	558

Advantages

- Quick-acting plug for wellbore strengthening and lost circulation applications
- Single-sack system, though higher densities may require the addition of a thinner
- Compatible with freshwater, seawater, brines and NAF
- Temperature stable to at least 177° C (350° F)
- High-performance, High-shear strength pill
- Can be mixed as a pill at densities of up to 18.0 lb/gal (2.16 s.g.)
- Easy to mix and pump with standard rig equipment
- Does not require an activator or retarder
- Does not depend on time or temperature to form a rigid plug
- Can be pre-mixed well in advance of pumping provided pill is agitated continuously

Limitations

- Approximately 35% acid soluble

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Toxicity and Handling

Bioassay information is available upon request.

Handle as an industrial chemical, wearing protective equipment and observing the precautions as described in the Material Safety Data Sheet (MSDS).

Packaging and Storage

FORM-A-BLOK product is packaged in 9 kg (20 lb), multi-wall, paper sacks.

Store in a dry, well-ventilated area. Keep container closed. Store away from incompatibles. Follow safe warehousing practices regarding palletizing, banding, shrink-wrapping and/or stacking.

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