

# FORM-A-PLUG RET

*FORM-A-PLUG\* RET additive is a grade of soluble magnesium chloride formulated for delaying the cross-linking reaction of the FORM-A-PLUG II lost circulation pill to avoid premature setting during the mixing stage.*

## ***Typical Physical Properties***

Physical appearance.....White powder/crystals  
Specific gravity ..... 1.57

## ***Applications***

FORM-A-PLUG RET agent is used in FORM-A-PLUG II pills to increase the set-up time of the lost circulation slurry. It should be added to the drill water before adding FORM-A-PLUG II and/or FORM-A-PLUG\* ACC agent.

FORM-A-PLUG RET retarder will delay chemical reaction which forms a rigid cross-linked gel structure. It is therefore important to carefully control the product concentrations and mixing conditions in order to ensure that the reaction proceeds as expected. The formulation can be adjusted for density up to 2.16 sg (18 lb/gal) by adding barite or other appropriate weighting materials. Barite may also act as a retarder.

Recommended concentrations are 3.5 - 17.5 lb/bbl (10 - 50 kg/m<sup>3</sup>) depending on the temperature and the desired setting time. Pilot testing is recommended before mixing to estimate the time to create a well-set plug.

---

### ***Advantages***

- Delays cross-linking to avoid premature setting during mixing and displacement

### ***Limitations***

- Must be added to the drill water before the FORM-A-PLUG II additive

### ***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-PLUG RET additive is packaged in 50-lb (22.7-kg), multi-wall, paper sacks.

Store at moderate temperatures in dry, well ventilated area.

This document is supplied solely for informational purposes and M-I SWACO makes no guarantees or warranties, either expressed or implied, with respect to the accuracy and use of this data. All product warranties and guarantees shall be governed by the Standard Terms of Sale.

