TBC-BRINADD

A DIVISION OF TEXAS UNITED CHEMICAL COMPANY, LLC

GENERAL GUIDELINES FOR APPLICATION OF TBC-BRINADD WATER-SOLUBLE BRIDGING PARTICLE SYSTEMS

1. If you have any questions concerning a particular application, please call your TBC-Brinadd representative for the proper recommendation.

2. Always saturate the base brine prior to adding **Bridgesal-Ultra™** or **Bridgesal-Ultra SF**. This is done by adding the prescribed amounts of evaporated sodium chloride and/or **Ultrasal™ 10E**.

3. Saturated brine spacers should be used preceding and following **Bridgesal-Ultra** or **Bridgesal-Ultra SF** pills to prevent the dissolving of sodium chloride bridging particles during placement.

4. Should it be necessary to use **Plug-Sal®** or **Plug-Sal X** to seal formations or gravel pack sand with larger pore sizes, the pill in the casing should be displaced with **Bridgesal-Ultra SF, Hysal™ SF, Hysal HD** or **Hysal HT** prior to placement of a gravel pack assembly.

5. When bridging the inside of a gravel pack screen, add the following products to **Bridgesal-Ultra/Bridgesal-Ultra SF** or **Hysal SF/Hysal HD/Hysal HT**.

   A. 6 or 8 Gauge: **Plug-Sal**
   B. 12 Gauge: **Plug-Sal and Plug-Sal X**

6. If a **Bridgesal-Ultra/Bridgesal-Ultra SF** pill is placed across a production zone above a less dense low salinity/unsaturated brine in the rat hole, the heavier pill will migrate downward displacing the less dense, low salinity solution upward. As the unsaturated brine reaches the perforations it will dissolve the sodium chloride bridging particles allowing water to be lost to the formation.

7. Use **pH Buffer** with all calcium chloride brines.

8. If a pill does not adequately stop your fluid loss problem or prematurely breaks down, please contact your TBC-Brinadd representative.