



Gas Well Supply

5003 Summerbrook Dr, Colleyville, Texas U.S.A 76034

Ph: (530) 846-4400 (530) 846-4499

Fax: (530) 846-4500

Technical Information

S I C – 505 SCALE INHIBITOR CAPSULES

PRODUCT DESCRIPTION

S I C - 505 exhibits what is known as the “threshold effect”. This happens when very small amounts of a scale inhibitor (**S I C - 505**) can help keep large quantities of scalants in solution. The phosphonates in **S I C - 505** are very effective threshold scale inhibitors. Data shows that one molecule of phosphonate can inhibit 5,000 to 10,000 molecules of scalant. This appears to be done under present theory by the absorption of the threshold agent (**S I C - 505**) on the “growth sites” of the scalant crystal; thereby the growth pattern is altered so that crystals are formed more slowly and are not as likely to clump together to form scaling problems on equipment. They can be considered as distorted.

The effectiveness of **S I C - 505** varies depending upon conditions such as water saturation, temperature, pH, super-saturation and type of scalant. The phosphonates have been found to be very effective in a wide variety of scale precipitating systems including calcium carbonate, calcium sulfate, calcium phosphate, strontium sulfate, barium sulfate, ferric hydroxide, aluminum hydroxide, copper hydroxide and others.

S I C - 505 is a white to off-white pellet with a specific gravity of 1.5-1.65. The capsules will therefore fall quite readily in Heavy Brine.

PRODUCT FEATURES

S I C - 505 functions in three (3) ways:

1. Scale Inhibitor
2. Sequestration
3. Scale Removal

PRODUCT ADVANTAGES

SEQUESTRATION OF SCALE - Chelation or sequestration is a process of using a chemical agent to form a stable, water soluble complex with a metal ion. Sequestering is a good method of capturing and holding very low levels of unwanted metals in solution.

Efficiency of sequestration is dependent upon variables such as pH, choice of agents, etc. The best comparison is under actual use of field conditions.

SCALE REMOVAL - Phosphonates remove metal oxides and scale by forming water soluble complexes with the metals. A major advantage of these products is the speed of removal of metal oxides and scale and they help reduce further corrosion of the metal surfaces by passivation; therefore, **S I C - 505** is useful in oil and gas systems, boilers, cooling towers, evaporators and other water systems.

TREATMENT AND PROCEDURE FOR PRODUCTION OPERATIONS

S I C - 505 dissolves slowly and releases the chemicals into the system. The amount used depends on the nature of each system. Dissolving time is not determined because of the variation in all of the fluid conditions. A loading amount is suggested with small additional amounts weekly or as needed.

Use **S I C - 505** at a ratio of 2-3 PPM of **S I C - 505** to the weight of water coming into the system or the total weight of water circulating in the system. Always make allowances for the extra water being added to the system. A special scoop is provided with each container of product sold.

It is often best to slug the system with product and then add regularly to maintain control of the problem.

STORAGE AND HANDLING

S I C - 505 should be stored in a cool, dry location. **S I C - 505** come packaged in poly pail (40 lbs) and are available in bulk quantities upon request. As with all industrial chemicals, contact with eyes or skin should be avoided. Wash thoroughly with water. Always remove capsules from the container with the scoop provided while wearing rubber gloves to avoid skin contact. Goggles are advised. A material safety sheet outlining proper handling of this product is available upon request, or will be forwarded upon the purchase of **S I C - 505**.