



ALTACHEM LTD.

Technical Data Sheet

Altachem Part No: AC-1300 Series

SCALE INHIBITOR PELLETS (SIP-100)

SCALE INHIBITOR PELLETS (SIP-100) (Carbonate Scale – Water Injection Wells - Rust)

			Color – White		Packaging – 40 lb. Pail	
			TDG – Non-Regulated Product		Allowable – Air or Ocean Freight	
SCALE INHIBITOR PELLETS (SIP-100)			PELLETS INITIAL SLUG TREATMENT			Weight Ea.
5/16"	.3125	7.9375 mm				
HS Code				Regulations	NON-TDG	
Form		Solid		Melting Point	N/A	
Color		White		Solubility in Water	100%	
pH		10.0-12.0		Solubility in Brine	100%	
Specific Gravity		1.5-1.8		Solubility in Crude	INSOLUBLE	

DESCRIPTION

SCALE INHIBITOR PELLETS (SIP-100) functions in three (3) ways. They can act as a scale inhibitor, a scale remover, and are also used for sequestration.

SCALE INHIBITOR PELLETS (SIP-100) exhibits what is known as the "threshold effect". This happens when very small amounts of a scale inhibitor **SCALE INHIBITOR PELLETS (SIP-100)** can help keep large quantities of sealants in solution. The phosphonates in **SCALE INHIBITOR PELLETS (SIP-100)** are very effective threshold scale inhibitors. Data shows that one molecule of phosphonate can inhibit 5,000 to 10,000 molecules of sealant. This appears to be done under present theory by the absorption of the threshold agent **SCALE INHIBITOR PELLETS (SIP-100)** on the "growth sites" of the sealant 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 **SCALE INHIBITOR PELLETS (SIP-100)** varies depending upon conditions such as water saturation, temperature, pH, super-saturation and type of sealant.

PRODUCT USEAGE - APPLICATION

SCALE INHIBITOR PELLETS (SIP-100) 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 **SCALE INHIBITOR PELLETS (SIP-100)** at a ratio of 2-3 PPM of **SCALE INHIBITOR PELLETS (SIP-100)** 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 products sold.

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

SCALE INHIBITOR PELLETS (SIP-100) are very effective threshold scale inhibitors, the phosphonate type inhibitors have been found to be very effective in a wide variety of scale precipitating systems including calcium carbonate, calcium phosphate, ferric hydroxide, aluminum hydroxide, copper hydroxide and others. 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, SIP-100 is useful in oil and gas systems, boilers, cooling towers, evaporators and other water systems.

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.

SAFETY & HANDLING

Please refer to SDS prior to using this product. As with all industrial chemicals, contact with eyes or skin should be avoided. If contact with skin is made wash thoroughly with water. Pellets should be stored in a cool dry place. Always remove pellets from the container with the provided scoop while wearing rubber gloves to avoid skin contact. Goggles are advised.

DISCLAIMER OF LIABILITY

The information in this bulletin is believed to be accurate; however all recommendations are made without warranty since the conditions of use are beyond Altachem Ltd. control. Altachem disclaims any liability in connection with the use of the information and does not warrant against infringement because of the use of any of its' products in combination with any other material or in any process.



ALTACHEM LTD.

Technical Data Sheet

Altachem Part No: AC-1300 Series

SCALE INHIBITOR PELLETS (SIP-100)

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, SIP-100 is useful in oil and gas systems, boilers, cooling towers, evaporators and other water systems.

TREATMENT DETERMINATION

SCALE INHIBITOR PELLETS (SIP-100) 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 SIP-100 at a ratio of 2-3 PPM of SIP-100 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.

PRODUCT SPECIFICATIONS

SCALE INHIBITOR PELLETS (SIP-100) are a white to off-white pellet with a specific gravity of 1.5 - 1.8. This pellet will therefore fall quite readily in Heavy Brine.

SAFETY & HANDLING

Please refer to SDS prior to using this product. As with all industrial chemicals, contact with eyes or skin should be avoided. If contact with skin is made wash thoroughly with water. Pellets should be stored in a cool dry place. Always remove pellets from the container with the provided scoop while wearing rubber gloves to avoid skin contact. Goggles are advised.

DISCLAIMER OF LIABILITY

The information in this bulletin is believed to be accurate; however all recommendations are made without warranty since the conditions of use are beyond Altachem Ltd. control. Altachem disclaims any liability in connection with the use of the information and does not warrant against infringement because of the use of any of its' products in combination with any other material or in any process.