

GEOCHEMM

Technical Data Sheet GEO GUARD 500

Oilfield Scale Inhibitor

Scope of Application	: GEO GUARD 500 is a unique scale inhibitor which is highly effective for a wide range of inorganic salts containing calcium, barium but especially sulfate.
Chemistry and Mechanism of Action	: GEO GUARD 500 is a low molecular weight carboxylate copolymer which combines excellent precipitation inhibition and dispersing activity in the same polymer through at least three mechanisms: <ul style="list-style-type: none">• Solubility enhancement by threshold effect, which reduces precipitation of low solubility inorganic salts.• Crystal modification, which deforms the growing inorganic salt crystal to give small, irregular, readily fractured crystals that do not adhere well to surfaces and can be easily removed during cleaning operations.• Dispersing activity, which prevents precipitated crystals or other inorganic particles from agglomerating and depositing on surfaces.
Anti-Precipitation Performance	: GEO GUARD 500 polymer is a highly effective anti-precipitant for barium and calcium sulphates, calcium carbonate and calcium phosphate. In addition, it gives excellent dispersancy for most of the inorganic particulates.
General Description	
Form	: Liquid
Colour	: Clear
Specific Gravity	: ~1,1 g/cm ³
pH	: >4,0 (aqueous solution)
Application	: <ul style="list-style-type: none">• Scale inhibition in top side equipment• Scale build-up prevention downhole in secondary oil recovery where barium sulphate, calcium sulphate and calcium carbonate are a major problem.
Benefits	: <ul style="list-style-type: none">• Contains no phosphorus, making its use acceptable where legislation requires that discharge waters contain low or no phosphorus.• Has excellent thermal and hydrolic stability and can be used at any pH without degradation.• Exhibits exceptional stability in the presence of high salinity.• Shows a good ability to remain soluble in the presence of a high level of calcium.• Its calcium tolerance is better than acrylic homopolymers.

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- Offers a strong dispersant activity contrary to phosphonates.

Packing

: **GEO GUARD 500** is packaged and delivered in 25 lt pail/ 200 lt drums or 1000 lt IBC.

Storage

: The product should be stored in original container and should be very well closed after using. Refer to MSDS document for more detailed information.