

Technical Data Sheet (TDS)

Product Name: Oil-field Corrosion and Scale Inhibitor

Product Code: CSI-0715

Revision Date: 2025-03-15

1. Product Description

This product is composed of multiple organo-phosphonates, surfactant and synergistic agents. It chelates Ca^{2+} and Mg^{2+} in water and inhibits scale formation through crystal lattice distortion. It also provides excellent chelation and dispersion for calcium carbonate, calcium sulfate, calcium phosphate and other scale-forming salts. This product is primarily used for scale inhibition and removal in oilfield production processes, preventing formation and pipeline blockage caused by scaling. It features high temperature resistance, alkali and salt tolerance, excellent stability under reservoir conditions, and low dosage requirements.

2. Application

Oilfield Water Injection Systems/Produced Water Treatment/Downhole and Surface Facilities

3. Product Features

- Excellent inhibition of calcium, barium, and strontium scales
- Prevents corrosion in pipelines, injection wells, separators, and production equipment
- Performs effectively in high salinity and high temperature environments
- Compatible with most oilfield water chemicals and production fluids
- Reduces downtime and maintenance costs
- Thermal and shear stable formulation
- Available in environmentally friendly, low-toxicity versions

4. Typical Properties

Property	Value
Appearance	Clear to yellow liquid
pH (1% solution)	2.0±1.5 or 8.0-11.0
Density (20°C)	1.10 – 1.30 g/cm ³
Solubility	Completely soluble in water and brine

*Note: The above data are typical values and not product specifications.

5. Usage & Dosage

Typical dosage: 10 – 100 ppm (depending on water chemistry, scaling tendency, and operating conditions). Dosage should be determined based on water analysis and system requirements. Please consult our technical team for optimized treatment programs.

6. Packaging

- 25 kg / 200 kg plastic drums / 1000L IBC Tote
- Customized packaging available upon request

7. Storage & Handling

- Store in a cool, dry, and well-ventilated area.
- Avoid direct sunlight and freezing.
- Shelf life: 12 months in original unopened packaging.

8. Safety & Environmental Information

- Handle with standard oilfield chemical safety precautions
- Refer to Safety Data Sheet - SDS for full safety and handling information.

9. Compliance

Complies with relevant oilfield environmental and safety regulations.