

Technical Data Sheet (TDS)

Product Name: High Hardness

Product Code: CSI-0737

Revision Date: 2025-03-15

1. Product Description

This product is mainly composed of multiple organo-phosphono-carboxylic acids, polycarboxylic acids, sulfonate-containing co-polymers, corrosion inhibitors and surfactant. It is suitable for high-concentration circulating cooling water systems where the sum of calcium hardness and alkalinity reaches up to 1500mg/L.

2. Application

High Hardness Industrial Cooling Water / Recirculating Cooling Water Systems / Open Cooling Towers

3. Product Features

- Excellent scale inhibition for calcium carbonate, calcium phosphate, and magnesium silicate
- Superior corrosion protection for multi-metal systems
- Effective under high cycles of concentration and high total hardness
- Minimizes fouling on heat exchangers, pipes, and cooling tower fills
- Helps reduce blowdown frequency and water usage
- Compatible with most biocides and dispersants
- Environmentally responsible, phosphorus-reduced formulation available

4. Typical Properties

Property	Value
Appearance	Transparent yellow liquid
pH (1% solution)	2.0±1.0
Density (20°C)	1.10 – 1.30 g/cm ³
Solubility	Completely soluble in water

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

5. Usage & Dosage

Typical dosage: 50 – 250 ppm (depending on water quality, hardness level, and system load)

Dosage should be determined based on system operating conditions and water analysis.

Please consult our technical team for optimal treatment program design.

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

- Non-toxic formulation
- Handle with standard industrial safety precautions
- Refer to Safety Data Sheet - SDS for full safety and handling information.

9. Compliance

Complies with relevant local and international environmental regulations.