



FCA5200 Chemical Cleaning Agent

FCA5200 is a high-efficiency low-temperature chemical cleaning agent produced for industrial recirculating water systems, applied to remove calcium carbonate, calcium sulfate, iron oxide, and composite scale/deposits. Operating effectively at ambient to 60° C, it rapidly dissolves stubborn fouling while providing comprehensive protection to carbon steel, low-alloy steel, stainless steel, and other metallic components through an advanced corrosion-inhibition system. It effectively mitigates hydrogen embrittlement, pitting corrosion, and Fe³⁺-accelerated corrosion risks. Widely applied across petrochemical, power, mechanical, and HVAC industries for cleaning heat exchangers, boilers, reactors, storage tanks, and pipelines, FCA5200 restores heat transfer efficiency, extends equipment life, and ensures safe system recommissioning.

Product Features

- ❖ Broad-Spectrum Descaling: Rapidly dissolves carbonate, sulfate, iron oxide, and mixed deposits at mild temperatures (ambient–60°C), minimizing downtime.
- ❖ Multi-Layer Metal Protection: Composite inhibitors maintain corrosion rate <1 g/(m²h) (per 《HG/T 2387》 standard), effectively suppressing hydrogen embrittlement, pitting, and Fe³⁺ -induced corrosion.
- ❖ Superior Material Compatibility: Safe for carbon steel, low-alloy steel, stainless steel, and dissimilar-metal assemblies with zero pitting risk.
- ❖ User-Safe & Streamlined: Liquid formulation ensures easy dosing and mixing; residues are readily neutralized and treated; low irritation profile complies with industrial safety protocols.
- ❖ Eco-Efficient Application: Low-residue, biodegradable profile; recommended dosage 5%–10% (v/v), adjustable per fouling severity for optimal cost-effectiveness.

Physicochemical Properties

The following represent typical properties of FCA5200 for reference only and are not guaranteed supply specifications.

Refer to official technical documentation for certified data.

Item	Index
Appearance	Colorless to light yellow transparent liquid
Density (20°C) (g/cm ³)	1.08 ± 0.05
pH (1% aqueous solution)	≤1.0

*For specialized applications or customized solutions, please contact FFM Inc. directly.

Instructions for Use



Product Data Sheet- Membrane & Water Treatment Chemicals

Calibrated Chemistry, Constant Capability

- ❖ Application Scope: Removal of carbonate, sulfate, iron oxide, and mixed deposits from boilers, heat exchangers, reactors, storage tanks, engine cooling systems, HVAC units, and industrial piping. Compatible with carbon steel, low-alloy steel, stainless steel, and dissimilar-metal structures.
- ❖ Procedure:
 - Dose at 5%–10% (v/v) of system water volume; circulate until deposits are fully dissolved (duration varies with fouling level).
 - Recommended cleaning temperature: ambient to 60 ° C; thoroughly flush system post-cleaning; neutralization/passivation recommended if required.
 - Monitor pH and turbidity during cleaning for process control and safety.

Packing and Storage

25 kg plastic drums. Store sealed in a cool, dry, well-ventilated area away from heat and incompatible materials.

Shelf Life

12 months.

Precautions

Strongly acidic liquid. Wear acid-resistant gloves, goggles, protective clothing, and respirator. Never store or mix with alkaline substances. In case of skin/eye contact, rinse immediately with ample water for ≥ 15 minutes and seek medical attention.