

CI-S220 is part of the Fluid portfolio of eco-friendly, technically advanced corrosion inhibitors and intensifiers designed for a wide variety of applications including oil and gas, industrial descaling, water treatment and marine.

CI-S220 is highly effective for broad corrosion protection of common steels and alloys in high temperature applications up to 220°C (430°F). It can be combined with our proprietary Enviro-Syn<sup>®</sup> HCR<sup>®</sup> Modified Acid<sup>™</sup> and Synthetic Acid<sup>™</sup> technology, as well as conventional mineral acid systems.

### FEATURES & BENEFITS

- ✓ Highly efficient film forming
- ✓ Effective up to 220°C (430°F)
- ✓ Completely soluble in typical hydrochloric acid (HCl) blends
- ✓ Excellent corrosion protection with chrome alloys
- ✓ Compatible with anionic additives
- ✓ Compatible with a variety of elastomers
- ✓ REACH registered for onshore European applications

### APPLICATIONS

- ✓ Highly effective, eco-friendly acid corrosion inhibitor
- ✓ Ideal for use with Enviro-Syn HCR Modified Acid and Synthetic Acid systems
- ✓ For use with common acid systems, such as hydrochloric acid
- ✓ May be either batch mixed or slipstreamed into the operating system
- ✓ Typical loadings range from 5 L/m<sup>3</sup> to 20 L/m<sup>3</sup> (0.5% to 2.0%) based on metals, acid concentration, temperature and exposure time
- ✓ Compatible with formation brines and salt water

### PHYSICAL PROPERTIES

Appearance:	Dark orange liquid
Specific Gravity:	0.960
Flash Point:	36°C (97°F)
Freezing Point:	-25°C (-13°F)
Solubility:	Dispersible in water
Shelf Life:	> 1 year

### SAFETY, STORAGE & HANDLING

- ✓ Flammable liquid (UN1993)
- ✓ Stored in sealed drums or IBC totes
- ✓ Recommended shelf life of 1 year
- ✓ Consult SDS for additional information and PPE requirements

### Outstanding HSE profile

- Formic acid free
- Non-corrosive to skin
- Non-fuming
- Low toxicity
- Biodegradable

### CORROSION RATES

Table 1. CI-S220 corrosion inhibition in 15% HCl system.

CI-S220 (L/m <sup>3</sup> / gpt)	CI-1A Intensifier (L/m <sup>3</sup> / gpt)	Temp (°C / °F)	Coupon	Time (hr)	Corrosion (mm/yr)	Corrosion (lb/ft <sup>2</sup> )
5.0 / 0.350	0 / 0	90 / 194	1018CS	6	2.115	0.002
5.0 / 0.350	0 / 0	110 / 230	1018CS	6	4.651	0.005
5.0 / 0.350	2.5 / 0.175	110 / 230	1018CS	6	2.592	0.003
7.5 / 0.524	2.5 / 0.175	130 / 266	1018CS	6	7.316	0.008
17.5 / 1.222	15 / 1.048	150 / 302	1018CS	4	23.763	0.017

Talk to us today about our revolutionary products available globally.

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