

### FUNCTIONAL CI-408

#### CORROSION INHIBITOR for FOOD-GRADE PROPYLENE GLYCOL/WATER FLUIDS

#### APPLICATION:

**FUNCTIONAL CI-408** is a water and propylene glycol soluble ferrous corrosion inhibitor. Intended for use in water-based fluids that are designated for NSF H-3 applications. It is completely soluble in water and/or propylene glycol. It is not compatible with mineral oils, and synthetic esters.

#### COMPOSITION:

**FUNCTIONAL CI-408** is a proprietary, food grade additive in non-toxic propylene glycol carrier fluid. The components are listed under FDA 21 CFR 184.

Typical Properties	
Appearance	Clear, colorless liquid
Odor	None
Specific Gravity	1.09
Lbs per Gallon	9.0
Flash Point	116°C (240°F)
Kinematic Viscosity	15 cSt at 40°C
Solubility in mineral oil / water	Insoluble / soluble

#### TREATMENT LEVEL:

Use **FUNCTIONAL CI-408** at 0.5% wt in preventing iron (ferrous) corrosion in a 50:50 propylene glycol to water ratio. Increasing the amount of **FUNCTIONAL CI-408** does not improve performance, however, increasing the propylene glycol to water ratio will extend the effectiveness of the additive.

D4627 Iron Chip Corrosion Test at 50:50 wt propylene glycol to water	
Test hours	Rust appearance
Baseline- no additive	
17	Slight rust, light yellow solution
24	Heavy rust, yellow solution
With 0.5% CI-408	
17	No rust or discolored solution
24	No rust or discolored solution
41	No rust or discolored solution
48	No rust or discolored solution
96	Slight rust and light yellow solution

#### HANDLING:

**FUNCTIONAL CI-408** may cause skin and eye irritation and should be handled with suitable personal protection. Heating is not recommended or required for blending. Fumes resulting from heating of the product may be an inhalation irritant.

This Technical Data Sheet and the Safety Data Sheet contain information believed to be accurate and reliable. No warranty is made, however, to information beyond the control of FUNCTIONAL PRODUCTS INC. The engineering and management personnel of the user are responsible for determining the suitability of this or any product for any specific application, and this information is offered to them for that purpose.