

## **Product Description**

PROTOCOL SC-101 is a water-based blend of chelating and seguestering agents designed to convert insoluble compounds into water-soluble forms, making it easy to remove system contaminants. SC-101 effectively cleans corrosion and mineral scales, and converts compounds with copper, aluminum, zinc, iron, and lead into watersoluble forms for easy removal from hydronic and closed loop systems. SC-101 is typically used at a 1-5v% concentration, depending on system conditions and is non-hazardous, non-corrosive, non-alkaline, and biodegradable.

The SC-101 cleaning solution starts with a slightly acidic pH, gradually reaching a pH of ~8.0 over 4 to 12 hours of continuous circulation. Field use has proven that SC-101 is highly effective in cleaning most systems in one application when used in conjunction with PROTOCOL SD-102 System Degreaser for new materials of construction, or systems containing oil and grease residue or removal of silicate-based inhibitors.

To minimize flash rusting after the initial cleaning, 1-2v% of NoPit F-016 should be added to the final rinse solution as a lay-up inhibitor for initial system passivation.

SC-101 should be stored above 40°F to prevent crystallization and should not be used in systems containing galvanized steel. All waste should be disposed of in accordance with applicable laws.





# PROTOCOL® SC-101

Flash Point

INDUSTRIAL SYSTEM CLEANER

### **Technical Data**

Typical\* Composition: SC-101, v%

Water	≥ 82
Chelating and Sequestering agents	≥ 18
Color	Blue - Clear

Specific Gravity	~ 1.055 - 1.065

рН ~ 5.0 - 6.0

\*Typical properties not to be construed as specifications.

### **Materials Compatibility**

PROTOCOL SC-101 has no significant effect on commonly used elastomers, polyolefins, and nonmetallic films

- Buna N
- Neoprene
- **Butyl Rubber**
- Polypropylene
- LD Polyethylene
- **PVC**
- Zinc Chromate Primer
- **Epoxy**
- Polyurethane
- Tygofilm

Typical Properties: 3C-101	
Normal Boiling Point	~ 215 °F
Freeze Point	~ 18 °F

VP mm Hg (100°F) ~ 16

N/A

Solubility in water Complete

### Types of Scale Removed / Effectiveness

Rust	Excellent
Lime	Excellent
Magnesium Hydroxide	Excellent
Cupric Oxide	Excellent
Solder Bloom	Excellent
Black Rust	Very Good
Cuprous Oxide	Very Good
Aluminum Oxide	Good
Ferric Hydroxide	Fair
Ferrous Hydroxide	Fair
Zine Phosphate	Fair
Aluminum Phosphate	Fair
Calcium Phosphates	Fair
Calcium Sulfates	Slight
Magnesium Silicate	Slight

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