RETHINKING WATER LIMITED

RTW
WATER CONCENTRIC SOLUTIONS

7 Claremont Avenue, Timperley Cheshire, UNITED KINGDOM Tel; +44 7787 406996 E-mail: info@rtwater.co.uk Web: www.rtwater.co.uk

PRODUCT DATA SHEET

PRODUCT NAME: RTW-190

TYPE: Corrosion Inhibitor for Copper and Copper Alloys

PRODUCT DESCRIPTION

RTW-190 is a concentrated corrosion inhibitor based on aromatic azoles, specifically designed to protect copper and copper alloy components in cooling water systems. In addition to preventing corrosion, it acts as an efficient copper sequestrant, forming soluble complexes with dissolved copper ions to prevent redeposition on other system metals.

Copper corrosion can have widespread consequences-even low corrosion rates may lead to accelerated localized corrosion of mild steel surfaces. When soluble copper ions deposit on steel, they act as stable cathodic sites, intensifying steel corrosion. RTW-190 prevents this mechanism by forming a strong, protective film over copper surfaces, reducing corrosion and inhibiting copper ion migration.

APPLICATION AREAS

- Open and closed loop cooling water systems
- Industrial water circulation systems
- HVAC systems using copper/copper alloy components

KEY FEATURES & BENEFITS

- Targeted Copper Protection: Forms a durable passivating layer on copper and its alloys.
- Sequestrant Action: Prevents copper ions from redepositing onto steel surfaces.
- Prevents Accelerated Corrosion: Reduces localized corrosion on mild steel caused by copper plating.
- Broad Metal Protection: Provides general corrosion inhibition for ferrous and non-ferrous metals
- Low Dosage Efficiency: Economical use with effective protection at low concentrations.

DOSAGE & FEEDING

- **Recommended Dosage:** 3–5 ppm based on system water volume.
- Feeding Method: Continuous dosing is recommended via a cooling water line or directly into the cooling tower basin.
- Feeding Equipment: Use plastic or stainless-steel dosing equipment.

Dosage should be optimized based on system fouling, load, and operational conditions. For heavily fouled systems or aggressive water chemistries, higher initial dosages may be temporarily required.

STORAGE & SAFETY

Store in a cool, dry place. Avoid direct sunlight. Use appropriate personal protective equipment. Avoid contact with eyes and skin. In case of contact, rinse immediately with plenty of water.

PACKAGING

Polyethylene drums of 25 or 220 liters, containers of 1000 liters.