

ZI-CHEM 3111

Closed Cooling Water Corrosion Control

HIGHLIGHTS

ZI-CHEM 3111 is an essential component of the ZI-TECHASIA plant preventative maintenance management program in water systems.

ZI-CHEM 3111 concentrated power corrosion inhibitor formulation containing sodium nitrite used to provide broad spectrum corrosion protection of metals in closed recirculating cooling water systems.

This formulation functions by placing a passivating film on the metal surface. It is compatible with circuits containing ethylene glycol. In many applications, it is designed as a component of a multi-component program designed to provide comprehensive control of corrosion.

ZI-CHEM 3111 is compatible for below metalurgy;

- ✓ Copper
- ✓ Mild Steel
- ✓ Aluminum
- ✓ Stainless Steel

TYPICAL PROPERTIES

- Appearance: White or yellowish-white crystalline granules
- Specific gravity: 2.1 – 2.2
- pH (10% soln) 8.0 – 10.0
- Solubility in water 818 g/L (20°C)
- Melting point: 280°C

PRIMARY APPLICATIONS

This product is added only when the nitrite level falls below prescribed level in sample analyses. This will normally only be required if there are water losses from the circuit and the water is required to be topped up.

FEEDING & CONTROL

ZI-CHEM 3111 should be dissolved in site mixing tank and added periodically using a chemical injection pump or bypass feeder. Recommended chemical pump materials include PVC, polypropylene, Viton, Teflon and stainless steel.

The dosage will depend on the operating conditions and the chemistry of the water being treated. Your ZI-TECHASIA technical field specialist will recommend the most appropriate dosage for your particular application on an ongoing basis.

PRODUCT REGISTRATION

ZI-CHEM 3111 is registered to the NSF Nonfood Compounds Registration Program under Category Code G5 (Cooling and retort water treatment products – all food processing areas).

The components of this product are of low toxicity and rated by the US FDA as GRAS.

THE BENEFITS

- Improved heat transfer capacity
- Extended equipment life
- Reduced maintenance cost
- Avoid unscheduled downtime

COMMON APPLICATIONS

- Automotive industries
- Packaging facilities
- Power generating facility
- Tire & Rubber manufacturing
- Commercial & Institutional Building
- Food Industries

PACKAGING

- 25kg open top buckets with lid
- 25kg nylon bags

HANDLING & SAFETY

ZI-TECHASIA maintains a database of material safety data sheets (MSDS) on all our products. These contain health & safety information to assist in the safe and appropriate chemical handling, ensuring the protection of personnel.

