

ZI-CHEM 21B0

Cooling Water Corrosion & Scale

HIGHLIGHTS

ZI-CHEM 21B0 antifoulant is designed as a primary component of the ZI-TECHASIA plant efficiency management program in water systems.

ZI-CHEM 21B0 is a unique high-performance concentrated organic polymeric dispersant designed specifically to prevent silica-based scale deposits. When using this product, silica levels can be extended to well in excess of 300mg/L.

Silica is one of the most highly insulating scale deposits encountered in heat exchangers. If this is not adequately controlled, plant heat exchange performance will be severely impaired and energy costs significantly increased.

ZI-CHEM 21B0 functions by dispersing colloidal silica, and by preventing magnesium silicate at heat exchange surfaces. The molecules of the product also adsorb onto the surfaces of the potentially scale forming compounds, acting as a physical repulsive barrier between them.

TYPICAL PROPERTIES

- Appearance: Clear amber-coloured liquid
- Specific gravity: 1.1 – 1.3
- pH (neat) 3.8 – 4.6
- Flash point: None
- Freeze point: 0°C

PRIMARY APPLICATIONS

The primary feed points for cooling towers is continuous to the cooling tower basin added in proportion to the makeup water. Other applications require continuous addition upstream of primary scale deposition areas.

FEEDING & CONTROL

ZI-CHEM 21B0 should be added using a chemical metering pump with liquid end constructed of suitable materials. These 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.

THE BENEFITS

- Improved heat transfer capacity
- Extended equipment life
- Reduced water costs
- Avoid unscheduled downtime

COMMON APPLICATIONS

- Automotive industries
- Packaging facilities
- Power generating facility
- Pharmaceutical
- Pulp & Paper processing
- Petrochemical plant

PACKAGING

- 32kg pails
- 260kg drums
- 1,300kg IBC's or in bulk

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.

