TECHNICAL DATA SHEET

A 80CT

Non-Oxidizing Biocide for Open Recirculating Cooling Systems

1. PRODUCT DESCRIPTION

A 80CT is a fast-acting, broad-spectrum non-oxidizing microbiocide formulated for the control of bacteria, algae, fungi, and Legionella species in industrial water systems.

The product is based on a stabilized heterocyclic biocide formulation designed for rapid microbial inhibition and biofilm penetration.

A 80CT is particularly effective in open recirculating cooling towers operating under high temperature and variable pH conditions.

Designed for use in:
• Cooling towers
• Evaporative condensers
• Closed cooling loops
• Industrial process water systems
• Air washers

2. MECHANISM OF ACTION

A 80CT acts through enzymatic inhibition and cellular disruption:

Biocidal Activity:
The active heterocyclic compounds penetrate microbial cell walls and react with essential protein structures, inhibiting metabolic activity and leading to rapid cell death.

Biofilm Penetration:
The formulation penetrates existing biofilms and prevents formation of extracellular polymeric substances (EPS).

Resistance Control:
Best applied in alternating biocide programs to prevent microbial adaptation.

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3. APPLICATION & DOSAGE

Method of Application
A 80CT may be dosed neat or diluted prior to application.

Intermittent shock dosing is recommended.

Typical Dosage Range

Initial Shock Dose: 100 – 250 ppm
Maintenance Dose: 20 – 60 ppm

Dosage depends on:
• System volume
• Microbial load
• Retention time
• Operating temperature
• Seasonal conditions

Monitoring
• Dip slide bacterial count
• Legionella testing (where required)
• Visual inspection for slime
• ATP monitoring

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4. TYPICAL PHYSICAL & CHEMICAL PROPERTIES

Appearance: Clear to pale green liquid
Odor: Slight characteristic
pH (as supplied): 3.0 – 4.5
Specific Gravity @ 25°C: 1.05 – 1.10
Solubility: Completely soluble in water
Flammability: Non-flammable
Freezing Point: 0°C

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5. COMPATIBILITY

Material Compatible with:
• Stainless Steel (304, 316)
• PVC
• PVDF
• PTFE
• Polypropylene
• Cast Iron

Avoid direct mixing with strong oxidizers.

Technical Compatible with:
• Temperature > 60 °C
• pH 4 – 9

Compatibility Chart

Chemical	Compatibility
Chlorine	Compatible with controlled dosing
Bromine	Compatible
Quaternary	Compatible
Glutaraldehyde	Compatible

Alternate with oxidizing/non oxidizing biocide.

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6. PACKAGING

Available in:

25 kg HDPE drums

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7. STORAGE & SHELF LIFE

Store in original tightly closed containers.
Recommended storage temperature: 5 – 30°C
Protect from direct sunlight.
Shelf Life: 18 – 24 months under recommended storage conditions.