TECHNICAL DATA SHEET

A 60CT

Non-Oxidizing Biocide for Open Recirculating Cooling Systems

1. PRODUCT DESCRIPTION

A 60CT is a fast-acting, broad-spectrum non-oxidizing biocide formulated for biological control in open recirculating cooling water systems.

The product provides effective control of:
• Bacterial growth (aerobic & anaerobic)
• Algae development
• Fungal contamination
• Biofilm formation and biofouling

A 60CT contains a high-performance quaternary ammonium compound (QAC) with excellent dispersing and surface-active properties, allowing deep penetration into biofilm layers and improved system cleanliness.

The formulation is free from heavy metals and compatible with most cooling water treatment programs.

Designed for use in:
• Cooling towers
• Evaporative condensers
• Industrial open recirculating cooling systems
• Closed cooling circuits (where compatible)

2. MECHANISM OF ACTION

A 60CT acts through membrane disruption and surface activity:

Biocidal Action:
The quaternary ammonium compound disrupts microbial cell membranes, causing leakage of intracellular contents and rapid cell death.

Biofilm Penetration:
Surface-active properties improve wetting and penetration, allowing the product to reach embedded microorganisms within biofilms.

Dispersancy Effect:
Helps loosen and disperse biological deposits, improving heat transfer efficiency and system cleanliness.

This dual action ensures effective control of microbiological contamination and prevention of biofouling.

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3. APPLICATION & DOSAGE

Method of Application
A 60CT may be fed neat directly from the original container or diluted prior to dosing.
Shock dosing is recommended for optimal microbiological control.

It is recommended to alternate A 60CT with another compatible oxidizing or non-oxidizing biocide to prevent microbial resistance.

Typical Dosage Range
Shock Dose: 100 – 200 ppm (as product)
Maintenance Dose: 20 – 50 ppm

Dosage depends on:
• System volume
• Degree of contamination
• Temperature
• Retention time
• Seasonal conditions

Final dosage must be determined based on microbiological testing and system survey.

Monitoring
• Dip slide bacterial count
• ATP testing (if available)
• Visual inspection for slime and algae
• Residual biocide monitoring (if applicable)

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4. TYPICAL PHYSICAL & CHEMICAL PROPERTIES

Appearance: Clear to pale yellow liquid
Odor: Mild characteristic
pH (as supplied): 6.5 – 8.5
Specific Gravity @ 25°C: 0.98 – 1.05
Solubility: Completely soluble in water
Flammability: Non-flammable
Flash Point: Not applicable
Freezing Point: ~0°C

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5. COMPATIBILITY

Material Compatible with:
• Mild Steel
• Carbon Steel
• Stainless Steel (304, 316)
• Copper (short contact exposure)
• PVC
• HDPE
• Polypropylene
• PTFE

Avoid prolonged contact with strong oxidizing agents.

Technical Compatible with:
• Temperature > 60 °C
• pH 6 – 9

Compatibility Chart

Chemical	Compatibility
Chlorine	Compatible with controlled dosing
Bromine	Compatible
Isothiazolin	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 tightly closed original containers in a cool, dry, well-ventilated area away from direct sunlight.

Recommended storage temperature: 5 – 35°C.
Protect from freezing.

Shelf Life: 24 months under recommended storage conditions.
