



American Water Chemicals, Inc.

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PRODUCT DATA

AWC A-680 COOLING WATER BIO-DISPERSANT

DESCRIPTION AND USE

AWC A-680 is a specifically designed bio-dispersant for open recirculating cooling water systems containing high concentrations of suspended solids (mostly organic in nature) in the recirculating water either from atmospheric, makeup water, or process water contamination. The product is a special combination of surface active agents.

AWC A-680 is found to be especially effective where bacterial slimes (known as biofilm) have formed. Biofilm formation often results in corrosion by microbiologically induced corrosion. The presence of the biofilm will allow anaerobic bacterial growth. The most commonly found anaerobic bacteria are Sulfate Reducing Bacteria (SRB's). These bacteria will reduce sulfates in the water to H₂S which in turn will react with iron to form iron sulfide (FeS), a flaky corrosion product. This is known as Microbiologically Induced Corrosion (MIC).

AWC A-680 penetrates and disperses biofilms, allowing biocides to reach the bacteria beneath the surface of this protective barrier. This eliminates MIC in Cooling Towers. Regular use of the product has been proven to reduce required dosage of biocides and maintain cleanliness of heat transfer surfaces. The product is non-polluting at use levels.

CHEMICAL FEEDING AND CONTROL

AWC A-680 may be dosed intermittently or continuously. Continuous feeding has been proven to be satisfactory and economical in many circumstances. The product may be fed neat directly from the shipping container into the sump at a point where thorough mixing is ensured.

Normal materials of construction are satisfactory for the chemical feed system, however, copper, copper alloys, and aluminum metallurgies must be avoided.

The recommended dosage is 50 – 100 ppm, 3 times per week. It is recommended that this product be used as part of a complete cooling water treatment program to control corrosion, scale, fouling and biological contamination.

TYPICAL PROPERTIES

Appearance.....	Clear to slightly hazy Yellow liquid
Odor.....	Characteristic
Specific gravity.....	1.0-1.15
pH(1 % soln.in distilled water).....	6-8
Solubility	Soluble in water

SAFETY AND HANDLING

AWC A-680 may be toxic by ingestion. Do not take internally. If ingested, drink at least two (2) glasses of water and get medical attention. Contact with eyes causes severe irritation or burns. If eyes are contacted, immediately flush with clean water for 15 minutes and then get medical attention. For skin contact, wash with soap and water. For additional information, see the Material Safety Data Sheet provided for this product.

PACKAGING

AWC A-680 is available in 55-Gal Drums and 5-Gal Pails. Other packaging also available by special request.