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A chiller is a machine that removes heat from a liquid via a vapor-compression or absorption refrigeration cycle. This liquid can then be circulated through a heat exchanger to cool air or equipment as required.

Cooling towers are heat removal devices used to transfer process waste heat to the atmosphere. Cooling towers may either use the evaporation of water to remove process heat and cool the working fluid to near the wet-bulb air temperature or in the case of closed circuit dry cooling towers rely solely on air to cool the working fluid to near the dry-bulb air temperature.

Biocides and MicroBiocides are chemicals that prevent and eradicate unwanted biological fouling from the system. Biocides are of various nature such as oxidizing, non-oxidizing, cationic, anionic etc. Biological Fouling or Biofouling is the undesirable accumulation of micro-organisms, algae and diatoms, plants, and animals on surface, pipelines and heat-exchangers of cooling systems. Bio-fouling can be of aerobic (that require oxygen) or anerobic (that don't require oxygen) organisms. In general the former is found in Cooling Towers and the later in closed circuit systems.

Another very important reason for using Cooling Tower Micro Biocides in cooling towers is to prevent the growth of Legionella, including species that cause legionellosis or Legionnaires' disease, most notably *L. pneumophila*, or *Mycobacterium avium*. The various Legionella species are the cause of Legionnaires' disease in humans and transmission is via exposure to aerosols—the inhalation of mist droplets containing the bacteria. Common sources of Legionella include cooling towers used in open recirculating evaporative cooling water systems, domestic hot water systems, fountains, and similar disseminators that tap into a public water supply.

Micro biocides function in eradication of sulfate reducing bacteria, aerobic and anaerobic bacteria that are formed and found in Cooling Tower Water. Micro Biocides are very vital for Closed and Open Circuit Cooling Water Treatment.

TCF (Totally Chlorine Free) micro biocides are compatible with heat transfer fluids (HTF) and can be used without any fear of corrosion of chlorine addition to the system or depletion or degradation of HTF and corrosion of PHE (plate type heat exchangers)

Chemtex's™ Closed loop Micro biocide surpasses the performance of other such less effective closed loop treatment chemicals (such as Nalco 7330, Nalco 77352NA etc.)

Application:

Engine Jacket, Chiller Water Circuit, Glycol Brine System, Hot Water Circuit, Engine Coolant, Process chilling and heating etc.

Specification:

Chemical Type : Organic/Inorganic Chemical Compound (TCF)

Form : Liquid

Specific Gravity : Ranges from 1.0 to 1.2 depending upon product

Solubility : Completely Soluble in Water

Dosage:

The amount of Closed Loop Biocide required to inhibit or remove bio fouling depends on the type of system, application, re-circulating fluid property and plant operating conditions. The specific dosage rates will be specified by the CSL technical representative.

Major Benefits

ï,§ Prevention of Bio-fouling of system

ï,§ Avoid plugging of nozzles

ï,§ Avoids MIC (Microbiologically Induced Corrosion)

ï,§ Prevent Water Borne Diseases

ï,§ Improve heat loss because living organisms cause rise in temperature of water

ï,§ Does not add chloride to the system

To prevent the growth of virus bacteria in cooling tower, Chemtexâ€™s Closed Loop Chiller Water Non-Oxidizing Microbiocide is the best solution. To know more, mail to info@chemtexlimited.com or call to +91-33-71111111. Not only about the above chemical but also the details of other type of industrial chemicals like inhibited glycols, water treatment chemicals, boiler chemicals, ro chemicals, cooling chemicals, heat transfer fluids, Acid inhibitors (Rodine Type), cleaning chemicals, descaling chemicals etc can be found in above contact details.

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