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### **Application Chart**

#### **TYPE OF WATER TREATMENT**

BOILER TREATMENT	MANTEK® 365	MANTEK® 385	MANTEK® 400	MANTEK® 600	MANTEK® 1800	
DUILER I REATIVIENT	Low-Pressure Steam Boiler Treatment	Boiler Water Treatment	Non-Chromate Boiler Treatment	Boiler and Steam Line Treatment	Corrosion Treatment for Process and Heating Boilers	
OLOGER LOOP BUILDING	MULTI-MIST™ 888	MANTEK® 100 PLUS				
CLOSED-LOOP INHIBITOR	Nitrite-Free Closed-Loop Inhibitor	Non-Chromate Closed- System Corrosion Inhibitor				
	MANTEK® 850 PLUS	MANTEK® 15000MT				
COOLING TREATMENT	Cooling Water Treatment	Scale, Sludge, and Corrosion Inhibitor for Cooling Towers with Stressed Water Conditions				
DISPERSANT AND ON-LINE DESCALER	CWT-92™, M/M	BWT-93™, M/M				
	Cooling Tower Dispersant and On-Line Descaler	Boiler System Dispersant and On-Line Descaler				
	BACTICIDE™-45. C/M	MB-60B™, C/M	MB-1000™, C/M			
MICROBIOCIDE	Water Treatment Microbiocide	High Performance Bromine Microbiocide	Water Treatment Microbiocide Pellets			
	VIV OALTM					
STORM SEWER TREATMENT	VY-CAL <sup>TM</sup> Mud and Silt Remover					
	for Sewer Lines, Storm Sewers, and Cooling Towers					



#### BACTICIDE™-45, C/M

#### **Water Treatment Microbiocide**

Check-Mark™ Bacticide-45 is an EPA registered (464-692-66114) microbiocide containg 45% glutaraldehyde. It is a liquid product for use in controlling slime-forming bacteria, sulfate-reducing bacteria, fungi (yeast and molds), and algae.

APPLICATIONS: Recommended for use in air washers, recirculating cooling and process water systems, including pasteurizers and warmers and once-through cooling water systems, retort water systems and industrial, recirculating process water systems.



#### **BWT-93™, M/M**

#### **Boiler System Dispersant and On-Line Descaler**

Multi-Mist™ BWT 93 is a liquid blend of sodium polyacrylate polymer. When used as an on-line descaler, Multi-Mist BWT 93 is specially formulated to help prevent the buildup of scale and calcium carbonate on heat transfer surfaces. It also removes scale while the system is on line. When used as a dispersant, it disperses and conditions sludge for easy removal through blowdown. It is extremely effective in boilers under 300 psig.

APPLICATIONS: Recommended for use in all cooling towers and especially in systems that collect airborne debris such as mud and silt. The product should be used in low and medium pressure steam boilers. Not to be used on silica scale.



#### CWT-92™, M/M

#### Cooling Tower Dispersant and On-Line Descaler

Multi-Mist CWT-92 is a liquid blend of sodium polyacrylate polymer. When used as an on-line descaler, Multi-Mist CWT-92 is specially formulated to help prevent the buildup of scale and calcium carbonate on heat transfer surfaces. It also removes scale while the system is on line. When used as a dispersant, the high-molecularweight polymer lifts and suspends mud, silt, and iron oxide and allows their removal through normal bleedoff.

APPLICATIONS: It is effective in all cooling towers and especially in systems that collect airborne debris such as mud and silt.



#### MANTEK® 100 PLUS

### **Closed-System Corrosion Inhibitor**

Mantek 100 Plus is specially formulated for anti-corrosion action for copper, steel, and multi-metal systems. It contains a pH sensitive indicator which turns colorless when system pH is low. It protects closed recirculating hot/chill water systems against pitting, corrosion, and corrosion scale. Contains no chromates, zinc, or other heavy metal pollutants.

APPLICATIONS: Recommended for use in closed chill or hot loop water systems found in air conditioning and process operations. The product can be added manually or with a pot feeder.



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#### MANTEK® 365

#### Low-Pressure Steam Boiler Treatment

Mantek 365 is specially formulated to combat the problems of scale and corrosion in steam boilers that have a low makeup water requirement, a high level of steam returned as condensate and operate as heating boilers at less than 30 psig. Delivers balanced polymer/corrosion prevention and aids in the removal of sludge buildup. Helps prevent foaming, priming, carryover, and caustic embrittlement through the control of boiler water alkalinities.

**APPLICATIONS:** Recommended for use in systems having softened or hard water makeup and high condensate return. It is not recommended for process boilers with high makeup water requirements or boilers with steam pressure above 30 psig.



#### MANTEK® 385

#### **Boiler Water Treatment**

Mantek 385 is formulated specifically to low-pressure steam boilers. It provides protection from scale and corrosion for low pressure (<30 psiq) steam boilers that have a small makeup requirement. Useful for boilers that have a large amount of steam returned as condensate and for steam heating boilers. It contains nitrites and yellow metal corrosion inhibitors to protect steel and copper alloys. It also contains a volatile amine to protect the steam condensate system from carbonic acid corrosion.

**APPLICATIONS:** Recommended for use in low pressure (<30 psiq) steam boilers having a high rate of steam return.



#### MANTEK® 400

#### Non-Chromate Boiler Treatment

Mantek 400 keeps the boiler system clean and free of scale and mineral deposits to insure better heat and transfer with less fuel consumption. It allows water to boil smoothly without priming, foaming, or carryover. It also neutralizes acids that cause rusting, pitting, and corrosion.

**APPLICATIONS:** Recommended for use as an internal treatment for high pressure (>30 psiq) process steam boilers and low pressure (<30 psiq) steam boilers with low return. This product is normally used in conjunction with an oxygen scavenging product.



#### MANTEK® 600

#### **Boiler and Steam Line Treatment**

Mantek 600 is formulated to be used in conjunction with Mantek 400 scale inhibitor. Both treatments are required to obtain maximum scale and corrosion protection for the entire boiler steam line system as well as heat transfer and water confining surfaces. Mantek 600 removes oxygen and carbon dioxide to prevent corrosion throughout the boiler and steam lines. Helps end system pitting, contamination, and waste due to corrosion formation.

**APPLICATIONS:** Recommended use for treatment of high and low pressure boilers and steam lines to prevent oxygen corrosion.



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#### MANTEK® 850 PLUS

#### **Cooling Water Treatment**

Mantek 850 Plus is formulated with a revolutionary blend of polymers that prevents scale and sludge buildup and corrosion and surface pitting on multi-metal cooling system surfaces, especially in stressed water conditions. It has a unique polymer formulation that contains no chromate, phosphate, or zinc. Mantek 850 Plus works well in high-temperature industrial process waters and is highly effective in the presence of chlorine and bromine cooling biocides.

**APPLICATIONS:** Recommended for use in open-recirculating cooling water systems found in HVAC and process operations where a moderate bleedoff rate is required due to hard water, heavy load, or system tonnage.



#### MULTI-MIST™ 888

### Nitrite-Free Closed-Loop Inhibitor

Multi-Mist 888 is a molybdate-based closed-loop corrosion inhibitor for hot and chill loops. Specially formulated for use in older systems, as it will not promote "shelling". Ideal for use in "free cooling" systems. The product is nitrite free and contains no nutrients that can promote bacterial growth in the system.

**APPLICATIONS:** Recommended for use in older, dirty systems with iron deposits and free cooling systems where there is often contact with the atmosphere.



#### MANTEK® 1800

#### **Corrosion Treatment for Process and Heating Boilers**

Mantek 1800 is a supplemental treatment for use in chemically deaerated boiler feed-water to prevent oxygen-induced pitting of boiler tubes and feed lines. It aids in controlling surface pitting and corrosion and contains no heavy metals.

**APPLICATIONS:** Designed for use as an internal treatment for high pressure (>30 psiq) process steam boilers and low pressure (<30 psiq) steam boilers with low return systems (<90%). The product is not intended to be used alone. It should be used with a scale inhibiting product such as MANTEK 400.



#### MANTEK® 15000MT

## Scale, Sludge, and Corrosion Inhibitor for Cooling Towers with Stressed Water Conditions

Mantek 15000MT is specifically formulated to inhibit the formation of hard water scale and control corrosion of ferrous and nonferrous metals in open recirculating cooling tower systems. The ingredients in Mantek 15000MT are resistant to chlorine and bromine type biocides. It will treat water having high hardness or high alkalinity.

**APPLICATIONS:** Recommended for use in evaporative condensers, fluid coolers, Freon®\* condensers, ammonia condensers, and water cooled plastic injection molding equipment.

\* Reg TM DuPont Corp.





#### MB-60B, C/M

#### **High Performance Bromine Microbiocide**

Check-Mark<sup>™</sup> MB-60B is an EPA registered (935-71-66114), high performance granular bromine microbiocide which aids in the control of organic slimes of algae, bacteria, and fungi in the recirculating water of condensing and cooling equipment. It provides 57% available chlorine and provides 128% available bromine.

APPLICATIONS: Recommended for use in the following aquatic sites: Air Washer Water Systems, Commercial/Industrial Water Cooling Systems, Evaporative Condenser Water Systems, Ornamental Ponds and Aquaria, Heat Exchange Water Systems, Lakes/Ponds/ Reservoirs (Without Human or Wildlife Use), Industrial Scrubbing Systems, Industrial Auxiliary Water Systems, Industrial Process Water, Industrial Waste Disposal Systems, Pasteurizer/Warmer/Cannery Cooling Water Systems.



#### MB-1000, C/M

#### **Water Treatment Microbiocide Pellets**

Check-Mark MB-1000 is an EPA registered (6836-115-66114) microbiocide containing 39.2% available bromine and 44.4% available chlorine. This microbiocide is in a convenient-to-use briquette form. It is a dual-active biocide that controls algal, fungal, and bacterial slime.

**APPLICATIONS:** Recommended for use in evaporative condensers and cooling towers.



#### VY-CALTM

# Mud and Silt Remover for Sewer Lines, Storm Sewers, and Cooling Towers

Vy-cal is designed to remove buildup of mud, sand, silt, and sediment in municipal, sanitary, and storm sewer lines. It helps prevent stoppage in sewer lines, helps control pollution, cleans without disrupting service, and restores full capacity of lines and equipment. It chemically breaks up heavy deposits and changes them into light, fluffy particles to be flushed away by water.

**APPLICATIONS:** Recommended to be used in absorption units, air washers, humidifiers, cooling towers, evaporative condensers, and hot/chill water loops.

