



Product Facts

OPTIGUARD® MCM4280 All-in-One Treatment

- Applicable as a complete, all-in-one treatment for scale and corrosion control in low pressure boilers with low makeup conditions
- Superior control of hardness and iron deposition
- Improves boiler efficiency by maintaining cleaner heat transfer surfaces
- Maximum flexibility and forgiveness
- Convenient, safe, easy-to-apply liquid concentrate
- Contains molybdate to ensure complete corrosion protection
- Excellent for systems without a deaerator
- Helps protect boiler surfaces during standby conditions
- Simple, reliable control test

DESCRIPTION AND USE

OPTIGUARD® MCM4280 is an advanced, multicomponent formulation that includes a unique dispersant blend and corrosion inhibitor. It is designed to control boiler deposition and corrosion. If condensate treatment is required, a separate condensate product will also be needed.

OPTIGUARD MCM4280 controls deposit formation through two surface adsorption mechanisms: dispersion and crystal modification.

Dispersion - The patented polymer contained in this product adsorbs strongly to deposit particles and internal boiler surfaces, altering their normal surface charge properties. The attraction between particles and surfaces is greatly reduced. This inhibits both particle growth and attachment to surfaces. The result is a stabilized suspension of colloidal particles, readily removed through blowdown.

Crystal Modification - The polymer distorts the normal crystalline structure of deposit particles, so that normal growth is prevented. This prevents the formation of large, unstable particles that settle onto boiler surfaces.

OPTIGUARD MCM4280 promotes maximum boiler efficiency by preventing the formation of both hardness and metal oxide deposits on boiler heat transfer surfaces.

OPTIGUARD MCM4280 also contains molybdate to ensure passivation of the ferrous metal surfaces as well as protect against oxygen pitting in the preboiler and boiler circuits. OPTIGUARD MCM4280 is formulated to be particularly effective in systems without a deaerator.

TREATMENT AND FEEDING REQUIREMENTS

Proper treatment levels for OPTIGUARD MCM4280 depend on many factors particular to a given boiler system. The product should be used in accordance with control procedures that BetzDearborn establishes for a specific application.

OPTIGUARD MCM4280 may be fed neat, or diluted to any convenient strength with softened makeup, condensate, or feedwater. The preferred feed point for OPTIGUARD MCM4280 is to either the feedwater tank or hot well.

Feed systems should be constructed of 304 or 316 stainless steel. Tanks should be high density, cross-linked polyethylene. PVC should not be used in this service.



BetzDearborn

Shaping the Future of Water & Process Treatment

PACKAGING INFORMATION

OPTIGUARD MCM4280 is a liquid blend, available in a variety of containers and delivery methods. Contact your BetzDearborn representative for details.

STORAGE

Store OPTIGUARD MCM4280 at moderate temperatures and protect from freezing. If frozen, thaw completely and mix thoroughly prior to use.

SAFETY PRECAUTIONS

A Material Safety Data Sheet containing detailed information about this product is available upon request.