



Thornton, Musso & Bellemin

Corporate Headquarters in:

Zachary, Louisiana

Consultants located in: Alabama

Florida, Kentucky, Mississippi,

Oklahoma, Tennessee and Texas

PRODUCTS AVAILABLE

Orthophosphates

Zinc
Orthophosphates

Polyphosphates

Zinc
Polyphosphates

Ortho
Polyphosphates

Phosphate &
Silicate Blends

ALL TMB WATER TECHNOLOGIES CORROSION INHIBITORS AND SEQUESTRANTS ARE ANSI/NSF STANDARD 60 CERTIFIED FOR USE IN POTABLE WATER.

Corrosion and corrosion by-products not only cause aesthetic issues attributed to red or black water staining and/or unsightly turbidity, but can also pose certain health risks. The release of lead, asbestos fibers, and other contaminants into a potable water distribution system is a major concern and a challenge for many municipalities.

Long-term effects of corrosion may also lead to increased energy and pumping costs attributed to the additional pressure in a system due to constricted water flow from scale formation and tuberculation. The maintenance, repairs, and replacement of water mains, valves, and treatment equipment can also add up if a system goes unchecked. Corrosion must be controlled to minimize these problems.

THE ROLE OF PHOSPHATES

Phosphates are among the few recognized chemicals that can be safely added to potable water to combat the corrosive effects of minerals and other contaminants. Phosphate additives result in significant improvements in water quality for many treatment systems.

As a supplier of corrosion inhibitors and sequestrants, TMB offers one of the most comprehensive lines of phosphate products in the business. Unlike many competitors that may offer only a few products, TMB believes that having a complete range of chemistries available allows them to assist you in choosing the appropriate solution for your particular needs.

Choosing the best corrosion technology for you depends on two factors. What are your objectives and what are the specific characteristics of the water being treated? A successful treatment program is dependent on the proper analysis of your requirements and TMB is committed to helping you develop the best treatment program for your system. TMB's lines of corrosion products are available in dry or liquid formulations, as well as a variety of packaging options.





CORROSION INHIBITORS & SEQUESTRANTS

ORTHOPHOSPHATES

Orthophosphates are the simplest form of phosphate chemistry yet one of the most effective in correcting specific water treatment issues. Generally applied in easy-to-feed liquids but also available in a dry formulation, TMB orthophosphates have been successful in the industry when applied in lead inhibition applications as well as specific metal corrosion issues.

APPLICATIONS

Lead Inhibition

Corrosion Control

- General
 - Galvanic
 - Copper
 - Pitting/Underdeposit
 - Impingement
 - Graphitization
 - Crevice/Concentration Cell
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ZINC ORTHOPHOSPHATES

Zinc orthophosphates actively inhibit corrosion by forming a self-leveling microscopic protective film on the interior surface of the pipe walls and other metallic surfaces. This process inhibits the release of lead, copper, iron, and other heavy metals from water mains, valves, and domestic plumbing. Zinc orthophosphates also reduce rusty water and prevent the formation of iron deposits and the by-products of corrosion and are also effective in preventing the release of asbestos fibers for AC pipe.

Like other TMB phosphate-based corrosion inhibitors, zinc orthophosphates do not alter the pH of the treated water as caustic soda, lime, and other alkaline products do. By maintaining a more neutral pH, they can reduce the potential for Trihalomethane (THM) formation, a known cancer-causing contaminant, and efficiently reduce the amount of chlorine required for disinfection.

APPLICATIONS

General Corrosion Control

Copper Corrosion Control

Lead, Iron, and Copper Inhibition

Asbestos Fiber Leaching

Red Water Complaints



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CONTACT:
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POLYPHOSPHATES

Unlike orthophosphate-based chemistries, polyphosphates (metaphosphates) will sequester positively charged ion (cations) in liquid such as iron and manganese. By sequestering these and other problematic cations in the treated water, water can remain clear and colorless. While these cations are not actually removed in the process, the polyphosphate interrupts the crystal or precipitate forming process that typically results in customer complaints. By preventing the conversion of these cations from a soluble to an insoluble form, the resultant red or black water is not formed. Over time, polyphosphates will revert to orthophosphates while in the distribution system allowing this dual-action process to provide additional corrosion protection. Polyphosphates have been known to act as cathodic inhibitors further reducing corrosion tendencies.

Polyphosphates also act to reduce scale and tuberculation formation in the distribution system. By again interfering with the crystallizing formation, polyphosphates can reduce existing scale formations as well as prevent future formation. Reducing or preventing scale formation will help control taste and odor issues, higher pumping costs, and pitting.

APPLICATIONS

Increased Pumping Costs

Red and Black Water Complaints

Tuberculation

General Corrosion

H₂S Odors

Taste and Odor Issues

Anaerobic Decomposition

Soluble Iron Stabilization

Soluble Manganese Stabilization

Biofilm Formation

Sediment Deposit

Lime Slurry Scaling

ZINC POLYPHOSPHATES

The first generation of corrosion inhibitors since its inception back in the 1930's, zinc polyphosphates still have their place in water treatment today. In some instances, the addition of zinc to a basic polyphosphate creates a product that performs with increased efficiencies. Benefiting from the polyphosphates for its sequestering and scaling abilities and the zinc for its excellent corrosion control.

TMB provides a full line of dry-formulated zinc polyphosphates, along with several liquid versions, to assist in ease of application. Consult your TMB representative for the product that is right for your needs.

APPLICATIONS

Increased Pumping Costs

Red and Black Water Complaints

Scaling and Tuberculation

General Corrosion

H₂S Odors

Anaerobic Decomposition

Biofilm Formation

Sediment Deposit

Soluble Iron Stabilization

Soluble Manganese Stabilization

Taste and Odor Issues



CORROSION INHIBITORS & SEQUESTRANTS

ORTHO POLYPHOSPHATES

Ortho Polyphosphate blends are fast becoming the products of choice for many water purveyors across the nation. While often not the best product for some specific applications, ortho polyphosphate blends can provide the best treatment options for a multitude of various issues bridging both corrosive and scaling waters.

Combining the effectiveness of polyphosphates with that of orthophosphates, without the presence of zinc, these blends have a broad pH range, help stabilize calcium, prevent scaling, and provide effective copper control in harder waters.

APPLICATIONS

Increased Pumping Costs

Lead and Copper Inhibition

Asbestos Fiber Leaching

Red and Black Water Complaints

Corrosion Control

- General

- Galvanic

- Scaling and Tuberculation

- Pitting/Underdeposit

- Impingement

- Graphitization

- Crevice/Concentration Cell

Soluble Iron Stabilization

Soluble Manganese Stabilization

Biofilm Formation

Sediment Deposit

H₂S Odors

Anaerobic Decomposition

POLYPHOSPHATE & SILICATE BLENDS

When the use of zinc or phosphates is not an option or the need to reduce their concentration is required, the use of various other silicates or phosphate/silicate blends becomes necessary. By combining different silicates or phosphate/silicate blends together, TMB can provide a line of products for customers seeking treatment with alternative chemistries.

APPLICATIONS

Lead Inhibition

Corrosion Control

- General

- Galvanic

For more information on TMB Water Treatment or to reach your local representative, call: **800-762-9104**

Or visit us at: www.tmbwater.com

Thornton, Musso & Bellemin
WATER TREATMENT CONSULTANTS

