









Traditional corrosion and scale inhibitors contain phosphorus; its discharge in wastewater can lead to algal blooms, a reduction in dissolved oxygen and possible large-scale fish kills. Kurita America's PhosZero, a non-phosphorus corrosion inhibitor, contains E-FeX™ technology, a synergistic blend of ingredients, that replace the most common use of phosphorus in cooling water applications. This technology supports discharge compliance, reduced operating costs, enhanced scale and corrosion protection and increased plant safety.



### KURITA AMERICA ADVANTAGE



# PHOSZERO KEY FEATURES & BENEFITS

- Contains no phosphorous for a lower environmental footprint
- Favorable aquatic toxicity profile helps ensure regulatory compliance
- Exceptional scale and corrosion performance enables the protection and efficiency of capital assets.
- Simplified application minimizes the need for acid feed for pH control

#### TARGETED INDUSTRIES

- Automotive
- Biofuels
- Commercial & Institutional
- · Food & Beverage
- General Manufacturing
- Healthcare
- Microelectronics
- · Oil & Gas
- Power
- · Primary Metals

#### **Maximum Scale & Corrosion Protection**

The PhosZero family of cooling water treatment products are designed to provide scale and corrosion control similar to "traditional" phosphorus containing chemistries. Field results have proven that PhosZero promotes the formation of an adherent iron oxide passivation layer on carbon steel surfaces that is so thin it does not reduce heat transfer efficiency. The corrosion control features and function, in combination with its scale-inhibiting components, makes PhosZero a premier multi-functional chemistry for enhanced cooling system performance. Without an effective scale and corrosion control program in place, a facility's cooling system could be compromised, resulting in higher operating costs, production losses and shortened equipment life.

### **Environmentally Sustainable**

PhosZero adds no phosphorus to the cooling water. Our proprietary technology also has low impact on aquatic organisms in most discharge streams. This typically reduces a facilities' environmental footprint and improves results during Whole Effluent Toxicity (WET) testing. As a result, regulatory compliance with regard to plant effluent can be easier to attain and maintain.

## **Eliminated Phosphorus Discharge**

PhosZero products do not contain any phosphorus, zinc, molybdate, chromate or borate. Not only does this alternative chemistry help comply with customer discharge permits, but it meets the needs of animal feed regulations as required by the Food Safety Modernization Act (FSMA). In addition, the use of PhosZero can eliminate costs associated with phosphorus removal from the waste stream.

## **Improved Plant Safety**

PhosZero reduces the need for acid use and storage on-site. This can help with hazardous material reporting, insurance costs and handling mistakes.

