



## TG 325 OX<sup>®</sup> – A THIOGUARD<sup>®</sup> INNOVATION

All the Benefits of Thioguard<sup>®</sup>,  
Now Available in Powdered Form

### A SAFER, MORE COST-EFFECTIVE ALTERNATIVE TO BULK HYDRATED LIME, QUICK LIME OR SODA ASH

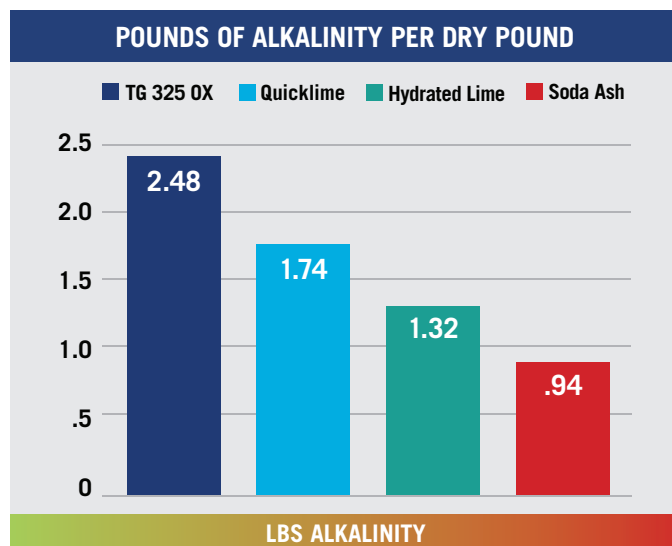
TG 325 OX<sup>®</sup> is a proven, premium quality, technical-grade magnesium oxide, manufactured through a proprietary process for application in municipal water and wastewater treatment. TG 325 OX<sup>®</sup> is mined and processed exclusively by Premier Magnesia, LLC in the USA.

### NO CAPITAL EXPENDITURES NECESSARY

Your existing storage and feed system can be used to deliver TG 325 OX<sup>®</sup> without costly modifications. You can begin reaping the benefits of TG 325 OX<sup>®</sup> without up-front costs.

### SUPERIOR HANDLING

TG 325 OX<sup>®</sup> is manufactured to an exacting particle size and specific surface area to provide the highest reactivity, and superior handling. This provides consistent performance, LESS CAKING AND “CLUMPING”, and better dispersion, which is critical to treatment plant operations, while reducing sludge generation.



### POUND FOR POUND TG 325 OX<sup>®</sup> DELIVERS MORE ALKALINITY

TG 325 OX<sup>®</sup> has the highest available surface area and reactivity as a result of Premier's proprietary manufacturing process. Wastewater treatment is performed in a sensitive biological environment wherein operation is performed at near-neutral or slightly alkaline conditions, requiring the highest reactive grade magnesium oxide available. Less reactive grades are incapable of sufficiently neutralizing acid generated in these environments, and will pass through the system unused or accumulate as sludge. TG 325 OX<sup>®</sup> results in improved plant performance and reduced operating costs.



OWNED, MINED AND  
PRODUCED IN THE USA  
ISO 9002:1994

**THIOGUARD.COM | 1.800.227.4287**

A DIVISION OF  
**PREMIER**  
MAGNESIA, LLC

## MULTIPLE BENEFITS & TOTAL SYSTEM TREATMENT

**TG 325 OX<sup>®</sup>** is available at distribution terminals throughout the USA, and delivers Total System Treatment with multiple additional benefits. When compared to Quicklime, there is no “slaking” required. **TG 325 OX<sup>®</sup>** is the practical choice that provides a safer, more cost-effective alternative.

## LIME SOFTENING/SLUDGE GENERATION

Lime produces calcium carbonate in wastewater which acts as a coagulant for hardness and particulate matter. Lime may potentially increase the volume of waste sludge up to 50 percent.

## THE PRACTICAL CHOICE: TG 325 OX<sup>®</sup>

EFFECT	TG 325 OX	HYDRATED LIME	QUICKLIME	SODA ASH
Sustainable pH	YES	NO	NO	NO
pH Spikes Above 9.0	NO	YES	YES	YES
Alkalinity Supplements Above 25 mg/L without pH Spikes	YES	NO	NO	NO
Produces Sludge	NO	YES	YES	NO
Metabolic Stimulant	YES	NO	NO	NO
Enhances Clarification and Dewatering	YES	YES	YES	NO
Improves Cake Solids	YES	MAYBE	MAYBE	NO
<b>HAZARDOUS TO HANDLE</b>	<b>NO</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>

## TG 325 OX<sup>®</sup> IS CLEARLY SUPERIOR TO HYDRATED LIME, QUICKLIME AND SODA ASH

**TG 325 OX<sup>®</sup>**, hydrated lime, quicklime, and soda ash each have different physical and chemical properties that affect how each reacts with the systems to which they are added.

COMPARISON GUIDE FOR COMMON ALKALIS					
ALKALI	MAGNESIUM OXIDE	MAGNESIUM HYDROXIDE	CALCIUM OXIDE	CALCIUM HYDROXIDE	SODIUM CARBONATE
Chemical Formula	MgO	Mg(OH) <sub>2</sub>	CaO	Ca(OH) <sub>2</sub>	Na <sub>2</sub> CO <sub>3</sub>
Lbs Dry Product required to Nitrify 1 Lb Ammonia	2.86	4.14	4.0	5.28	7.57
Molecular Weight	40	58	56	74	106
Common Name	TG 325 OX <sup>®</sup>	Mag. Hydroxide, Milk of Magnesia	Lime, Quicklime	Hydrated Lime, Slaked Lime, Milk of Lime	Soda Ash
Alkalinity, Lbs CaCO <sub>3</sub> Equivalent Per Lbs Dry Solids	2.48	1.68	1.74	1.32	.94

**CALL 1.800.227.4287 TODAY TO LEARN HOW TG 325 OX<sup>®</sup> CAN IMPROVE PLANT PERFORMANCE AND REDUCE OPERATING COSTS**



Premier Magnesia, LLC is a global market leader in magnesia-based products and solutions.

TG 325 OX<sup>®</sup> is a registered trademark of Premier Magnesia, LLC



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