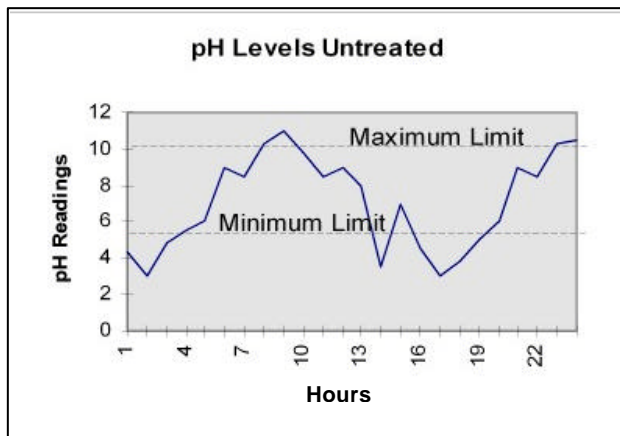




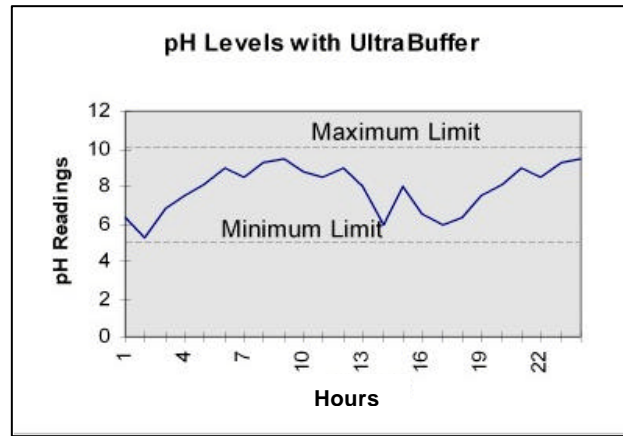
Ultra^SBuffer™
The Ultimate pH Neutralizer

DESCRIPTION

UltraBuffer™ is a blend of non-hazardous, non-corrosive, biodegradable pH buffering substance. It is designed to buffer the pH of both acidic and basic wastewater stream into a 5 to 9 pH range in order to comply with your discharge pH limits. UltraBuffer™ will raise the pH of an acidic wastewater or decrease the pH of a basic wastewater whichever is necessary. This product is particularly helpful in applications where the pH can exceed both high and low limits at any time. Unlike harsh acid and caustic, where an even slight overdose can overshoot the final pH, UltraBuffer™ will not overshoot the pH. When severely overdosed, it will bring the final pH to a neutral (7) range. Unlike magnesium hydroxide, UltraBuffer™ is very fast acting, requiring practically no retention time, and does not add slurry nor solid particulate to the wastewater.



Before



After

BENEFITS

- Non-Hazardous for DOT purposes
- Non-Corrosive to skin, equipment, and sewer pipes
- Biodegradable – environmentally friendly
- Does not overshoot pH when overdosed
- One solution for high and low pH equalization
- Fast reaction – does not require long retention time

Properties	UltraBuffer™	Caustic	Magnesium Hydroxide
Non-Hazardous	v		v
Non-Corrosive	v		v
Biodegradable	v		v
Fast Acting	v	v	
Highly Soluble – does not contribute solids to discharge water	v	v	
Maximum pH when overdosed	6.8-7.2	12+	10

Ultra^S Buffer™

APPLICATIONS

UltraBuffer™ can be applied anywhere where caustic and acid are currently being used to neutralize the pH of any wastewater discharge. It can also be used to maintain the pH in biological augmentation.

DOSAGE

Dosage rate depends on the pH and volume of the untreated wastewater. We suggest that you conduct a bench test to determine a starting dosage rate. Thereafter, the dosage can be adjusted further to meet the minimum or maximum discharge pH level allowed by your local, state, and federal regulations.

FEEDING

UltraBuffer™ can be fed directly into a neutralization or equalization tank using a powder dispensing system and pH controller set-up. In the absence of such system, the product should be fed upstream in a high flow or turbulent area, to allow sufficient mixing and distribution or into the equalization tank. There is no need for much mixing since the product will generate gas when added to the water. The evolution of gas helps the quick neutralization process.

This product cannot be made into a solution for feeding purposes. If this is done you will have a buffer of 7 pH but the strength will be much lower than the solid product.

MATERIAL SAFETY DATA SHEET

For information concerning typical properties, health hazard, flammability, reactivity, please consult the material safety data sheet.

PACKAGING

Available in 100 lbs and 400 lbs fiber drums. This product is moisture sensitive, addition on water will start an auto catalytic decomposition process. **Keep dry.** Also available in liquid version.

TECHNICAL ASSISTANCE

Our technical staff is available to assist in the application of our products. You may request assistance through your sales representative or by contacting us at (877) 938-4621.

REMARKS

The information and statements herein are believed to be reliable, but are not to be construed as warranty or representation for which we assume legal responsibility.

For **Medical and Transportation Emergencies** involving our products call (24-hour response): **(800)535-5053**

Revision Date: June 2005