

NITRAZYME™ PLUS Blended Solution for Odor Control

NITRAZYME™ PLUS solution is a proprietary (Patent pending) blend containing sodium nitrate and is a safe, natural biological approach to controlling odors and corrosion produced from reduced sulfur compounds in wastewater.

Typical Application

- Gravity mains
- Force mains
- Lift station wetwells
- Septage and leachate
- Solids processing
- Anaerobic lagoons

NITRAZYME™ PLUS solution provides a source of bound oxygen (nitrate-oxygen) to naturally occurring facultative anaerobic denitrifying bacteria present in wastewater, which these bacteria metabolize preferentially over alternative sources of oxygen such as sulfate. Denitrification is a respiratory process where nitrate is reduced to nitrogen gas (N₂) via a number of intermediates. The metabolic product of this reaction is inert, as opposed to odorous, toxic and corrosive hydrogen sulfide gas produced when sulfate reducing bacteria (SRBs) metabolize sulfate. NITRAZYME™ PLUS solution is effective at controlling odors for several hours to days, and also results in a reduction in Biological Oxygen Demand (BOD).

In many wastewater streams a trace level of dissolved sulfides may be present at the nitrate addition point. To address the presence of existing sulfide, a

proprietary component has been incorporated which reacts immediately with dissolved sulfide. Thus NITRAZYME™ PLUS solution is able to both immediately react with trace quantities of dissolved sulfides and prevent the downstream formation of new sulfides.

Typical Feed Requirements

NITRAZYME™ PLUS solution can be applied using basic chemical metering pumps. Dose rates will vary with temperature, velocity and level of BOD.

For additional treatment information, including dosage specific to your application, please contact your representative.

Typical Physical Properties	
Appearance	Clear to very slight amber liquid
Odor	None to slight chlorine odor
Solubility in Water	Complete
Specific Gravity	1.29 – 1.33 at 21°C (70°F)
Density	10.76 – 11.09 lbs./gal at 21°C (70°F)
Crystallization Temperature	< 9°C (15°F)
pH (as supplied)	8.5 – 11.0
Active Strength (as NO ₃ -O)	2.4 – 2.6 lbs/gal

Typical properties are listed for information only, and are not to be considered as specification requirements. These items are not analyzed on a routine basis.



Storage and Handling

Store in a cool, dry, well-ventilated place above 15°F away from incompatible materials such as flammable organics, or easily oxidizable substances.

NITRAZYME™ PLUS solution is an oxidizer and an irritant. Wear appropriate protective clothing. Avoid prolonged contact with skin and clothing. Avoid breathing vapors. After handling, always wash hands and clothing thoroughly with soap and water.

Read Material Safety Data Sheet before using, handling or storing this product.

Packaging

NITRAZYME™ PLUS solution is available in bulk quantities. For further information, please contact your representative. For reorders and customer service, call 800.345.3982.

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