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BIONOX SOLVER™

NOx Scrubbing Solution

BIONOX SOLVER™ is the first major breakthrough nonhazardous NOx control chemistry to effectively reduce nitrogen dioxide emissions in wet scrubber systems. This special proprietary formulation of powerful nitrogen dioxide reducing agents is designed to remove the unsightly and highly visible orange brown emission at the discharge point to enable compliance with air regulations.

BIONOX SOLVER is nonhazardous and safe to handle and does not produce dangerous, toxic and extremely odorous hydrogen sulfide gas at lower pH use conditions, a common problem with conventional sulfide scrubbing reagents. Low toxicity BIONOX SOLVER also eliminates the potential fire or explosive hazards of a hydrogen sulfide containing scrubbing liquid discharge in acidic plant effluent streams.

On scrubber installations using sodium hydroxide scrubbing solutions only, BIONOX SOLVER when added offers a significant 33-1/3% or greater improvement in nitrogen dioxide removal.

BIONOX SOLVER is successfully removing nitrogen dioxide emissions generated from these following sources:

- Titanium and stainless steel pickling operations
- Continuous strand superconductivity copper wire etching line
- Aluminum bright dip solutions
- Precious metals dissolving with aqua regia
- Catalyst calcining operations
- Surgical implant material etching
- Nanometals powder surface treatment
- Nitration of pharmaceutical preparations
- Semiconductor silicon wafer etching

BIONOX SOLVER simplifies and reduces the cost of scrubber system operation. Unlike typical sulfide reduction chemistry, using BIONOX SOLVER eliminates the need for an additional hydrogen sulfide polishing scrubber ahead of multiple NOx absorption scrubbers. With BIONOX SOLVER only one scrubber is needed to achieve satisfactory process NOx reduction on most applications.

BIONOX SOLVER is designed for use as a direct chemical reagent for existing NOx scrubbing systems. For new applications, BIONOX SOLVER is offered in combination with the Bionomic ScrubPac™ packaged scrubber system to achieve outstanding performance in a completely matched system.

BIONOX SOLVER is available in easy to use liquid form for batch or continuous scrubber operation. BIONOX SOLVER is offered in convenient 55-gallon drum size containers, 330-gallon totes, and for maximum economy 4,400-gallon bulk tank truck shipments.

For more information on BIONOX SOLVER and other Bionomic products call, FAX, e-mail or visit our web site.



- **Dramatically increases the NOx control efficiency of plain caustic scrubbing solutions**
- **Rids the troublesome orange brown colored plume on most applications**
- **Safer to use. Does not generate dangerous hydrogen sulfide at lower pH use conditions**
- **Simplifies wet scrubber operation/eliminates expensive multiple stage scrubbers**

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*Engineered Air Pollution Control
Systems With Unequaled Performance*

Bionomic Industries, Inc.

777 Corporate Drive • Mahwah, NJ 07430 • 201/529-1094 • Fax: 201/529-0252

E-mail: sales@bionomicind.com • Web site: www.bionomicind.com

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