

KNOCK OUT SULFUR WITH THE  
**ELIMINATOR™**



COMPLETE PACKAGED SYSTEMS  
FOR COST-EFFECTIVE HYDROGEN  
SULFIDE, MERCAPTAN AND OTHER  
REDUCED SULFUR COMPOUNDS  
REMOVAL

*Gas Technology Products*

Merichem Chemicals &  
Refinery Services LLC

# THE ELIMINATOR™

## KNOCKS OUT H<sub>2</sub>S

### KNOCK OUT H<sub>2</sub>S

**THE ELIMINATOR™**, is your best match for emissions compliance, odor control, and hydrogen sulfide hazards. With the flexibility to treat liquids or gas and the economy of low capital equipment expenditures, The Eliminator can be used for scrubber applications, atomized into gas streams, or added into process streams—without producing hazardous reaction byproducts.

The Eliminator liquid triazine products remove hydrogen sulfide (H<sub>2</sub>S) and mercaptans from process streams to form a stable, liquid, non-toxic byproduct. It does not react with carbon dioxide.

The reaction between The Eliminator and H<sub>2</sub>S is reliable, predictable—and virtually instantaneous. The result: a non-corrosive liquid byproduct that can be disposed of as a nonhazardous waste.

### APPLICATIONS

From gas streams to liquid process streams, high pH to low pH, The Eliminator is uniquely formulated to take on the most complex and demanding process conditions.

To treat gas streams with The Eliminator, a contact-type scrubber is ideal. Scrubber design depends on the volume to be treated and the TRS concentration. When gas volume and velocity is low, a fine mist of The Eliminator can be just sprayed into the gas stream for optimal results.

### THE ELIMINATOR STATS

Appearance	Light yellow liquid
Specific gravity @ 77°F	1.072
Density (lbs/gal) at 77°F	8.91
pH	10.3-11.8
Viscosity	15-20 cps @ 70°F
Flash point (TCC)	>200°F
Freezing point	-12°F
Surface Tension	54.6 dyne/cm

The Eliminator removes H<sub>2</sub>S from liquid process streams when used in combination with complete and rapid mixing. A static mixer placed right after The Eliminator injection point is ideal.

If a pump is already located in the process line, The Eliminator can be injected before the pump to achieve adequate mixing.

The Eliminator is used to treat process streams over a wide range of pH conditions. It is also effective for treating waste streams containing H<sub>2</sub>S and alkaline streams containing sulfur compounds before acidification, so that H<sub>2</sub>S is not released.

### CHEMISTRY

The Eliminator is a unique amine-based material that is significantly superior to materials in other scrubbing systems. For example, unlike many amine-based scrubbing compounds, The Eliminator does not form salts that can lead to H<sub>2</sub>S release upon heating or acidification.

Hydrogen sulfide and organic sulfides react with The Eliminator to form a byproduct without the danger of an uncontrolled release of H<sub>2</sub>S common to MEA, DEA, MDEA, and NaOH. As a result, reacted byproducts of The Eliminator have passed the U.S. EPA RCRA Reactivity Test.

### REACTION EFFICIENCIES

5.2 lbs. of The Eliminator react with  
1 lbs. hydrogen sulfide

3.7 lbs. of The Eliminator react with  
1 lbs. methyl mercaptan

### BENEFITS

The Eliminator provides continuous compliance with new Clean Air Act standards and will eliminate fines for non-compliance. It continuously reacts with TRS components, providing control and ensuring compliance with existing and future Clean Air Act standards.

The Eliminator eliminates odors associated with Total Reduced Sulfur (TRS) at their source. It controls high localized concentrations of H<sub>2</sub>S to a safe level, reducing the risk of workers being overcome and improving community relations.

The Eliminator also minimizes capital equipment expenditures for tying in small or remote TRS sources to the treatment system. Compared to alternative treatment systems, the cost of installing a small contact scrubber or injection system is less expensive and more expedient to implement.

## THE 1-2 PUNCH

Easy, economical and efficient H<sub>2</sub>S removal is only part of The Eliminator equation. Check out what The Eliminator leaves behind after it's done its work: a stable, non-corrosive, low-toxic, non-hazardous liquid. No solids, no special waste disposal requirements, no corrosive material.

The Eliminator hydrogen sulfide reaction product is classified as non-hazardous according to U.S. EPA regulations. In fact, the reaction byproduct of The Eliminator is sometimes used as a corrosion inhibitor.

Some companies use reacted The Eliminator to control corrosion in disposal systems and pipelines.

## GAS TECHNOLOGY PRODUCTS IN YOUR CORNER

From initial consultation to 24-hour technical support, GTP is ready to knock out H<sub>2</sub>S emissions at your plant with The Eliminator. And you'll have 25 years of experience in H<sub>2</sub>S removal to back it up.

Gas Technology Products have solid, liquid and regenerable catalyst systems to custom tailor sulfur removal solutions up to 30+ tons per day.



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