



# SARGO

We protect your environment

## ENVIRO-CHEM™ METHA

### For the Prevention of H<sub>2</sub>S Build-up in Anaerobic Digestion

Managing hydrogen sulfide (H<sub>2</sub>S) in anaerobic digestion (AD) systems is critical for protecting equipment, ensuring operational stability, and optimizing biogas quality. Enviro-Chem METHA offers a dual-action solution, delivering both preventive and curative effects to ensure the highest performance and reliability of your AD process.

#### 1. Preventive Effect

Enviro-Chem METHA acts proactively within the digester, intercepting sulfur compounds before they convert into H<sub>2</sub>S. By targeting the root cause of H<sub>2</sub>S formation, the product reduces the accumulation of corrosive gases and prevents damage to key system components such as engines, pipelines, and desulfurization units. This proactive approach extends the lifespan of your equipment and minimizes maintenance costs.

#### 2. Curative Effect

Even in systems with high existing H<sub>2</sub>S levels, Enviro-Chem METHA works effectively to neutralize and eliminate sulfur compounds already present in the system. This curative action helps rapidly stabilize digester operations, ensuring safe, efficient, and uninterrupted biogas production without costly downtime.



#### Key Competitive Advantages:

- Dual-Action Efficiency:** Unlike traditional solutions such as ferric chloride or iron hydroxide, which are largely reactive, Enviro-Chem METHA addresses both the prevention and reduction of H<sub>2</sub>S, delivering complete system protection.
- Higher Methane Content:** Copper boosts the efficiency of methanogenesis, leading to a higher proportion of methane in the biogas mix. This results in improved biogas calorific value and greater energy output..
- Reduced Operational Costs:** By minimizing the need for frequent chemical dosing, reducing maintenance requirements, and preventing corrosion-related damage, Enviro-Chem METHA lowers the overall cost of H<sub>2</sub>S management.

Criteria	ENVIRO-CHEM™	Iron Hydroxide
Action on sulfate-reducing bacteria (SRBs)	Inhibits up to 70% of H <sub>2</sub> S production.	No preventive effect.
Impact on CH <sub>4</sub> production	Low: 1.5–2 L/30 tonnes of inputs.	Up to 20x more needed.
Dosage	Liquid, homogeneous, easy to dose.	Solid, mechanical mixing required.
Handling and storage	Very little considering the automatic injection (liquid) and the volume. Not dangerous	Product not very practical in bags, lots of storage given the volume
Total cost	Economical thanks to low dosage.	High cost due to large quantities required.
Environmental impact	Controlled copper content, low risk.	No SRB inhibition.