

SENVIRO-CHEM

For the Prevention of H₂S Build-up in Anaerobic Digestion

When the biology in the digester is under pressure, particularly with variable or challenging feedstock, such as poultry litter or pig slurry, Untreated H2S levels can reach thousands of parts per million. This has traditionally been dealt with through the addition of ferric chloride or iron hydroxide but only by negatively impacting the biogas quality. Enviro-Chem is a concentrated liquid that has been used for many years in municipal and industrial applications to prevent sulphide, mercaptan and ammonia-related odours. It is biodegradable and is proven not to inhibit the natural decay of biological wastes, which is critical in AD as it means no negative impact on the methane content of the biogas.



ENVIRO-CHEM CX

Enviro-Chem is a powerful H2S control agent that to reduce gas emissions generated by organic decomposition (H2S, NH3 and mercaptans...etc.). Through its mode of action, EnviroChem allows the retention of high nutritional values in the digestate.



CHARACTERISTICS

Color: Green Density: 1.01 kg/l Packaging: 20L can / 1000L IBC Dosage: 1 to 1.5L/day per 40t of inputs.



PERFORMANCE

- Preventive and curative treatment of H₂S, NH₃ and mercaptans...
- H₂S reduction of up to 95% leaving the digester.
- Increased CH4 production compared to Ferric-Chloride and Iron hydroxide (2-4.3%)





ENVIRO-CHEM AND ITS COMPETITION

		Ferric chloride	Iron hydroxide	Ferric sludges
Volume	1L/30 tons inputs	30L/30 tons inputs	50kg/30 tons inputs	200-400 kg / 30 tons inputs X200-400
H ₂ S effect	Compared to Enviro- Chem Cx:	+10-20%	+10-20%	+10-20%
CH ₄ effect	Positive effect (less H ₂ S) without affecting methanogenic bacteria	Impacts methanogenic bacteria*	Impacts methanogenic bacteria*	Impacts methanogenic bacteria*
Activated carbon filter effect	Less H2S = longer life			
Handling and storage	Very little seen automatic injection (liquid) and volume. Not dangerous	Very dangerous and corrosive product	Inconvenient product in bags	Big volumes!
Price	Compared to Enviro-Chem Cx:	+10%	+100%	+10%

* FeCl₃ forms flocs which accumulate in the digester and create an unfavorable environment for methanogenic bacteria. Iron hydroxide can adsorb to the surface of bacteria and cause physical blockage. Iron hydroxide competes with bacteria for available nutrients and electron acceptors

SARGO S.A - WWW.SARGO.BE - INFO@SARGO.BE