

Bio-Control of H₂S and Volatile Fatty Acid Malodors Using a Specific Electron Acceptors Mixture

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DESCRIPTION

NTP is an environmentally benign, non-toxic and non-biocidal liquid for odor control. Under anaerobic conditions, bacteria metabolize organic carbon compounds to produce malodorous and explosive chemicals. These chemicals, (which include volatile fatty acids (VFA's), hydrogen sulfide (H₂S) and mercaptans) create nuisance odors near the oil drilling.

NTP effectively and economically prevents the production of H₂S and mercaptans, thereby stopping odors from forming thus creating a pleasant living environment. In **petroleum** industry, **NTP** is pumped in water storage tanks in order to oxidize the hydrogen sulphide smell and prevent further generation of H₂S.

NTP is a powdered product that is applied at low concentrations depending upon the initial concentration of hydrogen sulfide gas (H₂S), sulfate and soluble sulfide. This product is generally applied in areas where H₂S are generated such as: water and wastewater treatment plants, pulp and paper mills, petroleum wells, municipality drains and septic systems, grease traps and wherever anaerobic activity is present.

A start-up concentration to prevent the formation of these malodors varies from 1 to 100 ppm. Unlike other products, NTP:

- 1- Is not a biocide
- 2- Is environmentally-friendly and not toxic
- 3- Prevents the initial formation of these malodors and does not only mask it.
- 4- Oxidize existing H₂S and sulfide.
- 5- Modifies the metabolism of anaerobic bacteria and does not kill these bacteria essential for anaerobic biodegradation, therefore BOD and COD are not affected.
- 6- Prevents the corrosion induced by Sulfate-Reducing Bacteria (SRB).