



The Clear Choice for Sulfide Remediation and Control

Known to plug wells, corrode equipment and capable of forming potentially toxic gases, sulfides pose a huge challenge in the oilfield. Cudd Energy Services (CES) introduces OxiFlo[®] Oxidizer as the clear solution to counter sulfide contamination. This specially formulated solution of **stabilized** chlorine dioxide, offered exclusively in the global E&P market by CES, is designed for sulfide remediation and control in the oilfield.

Proven Solution

Chlorine dioxide has been proven in laboratory and field operations to effectively treat and control sulfide contamination.

OxiFlo[®] Oxidizer has all the benefits of generated chlorine dioxide gas, but is formulated in a stabilized solution that is safe to transport and handle. Once activated on site with CES' simple, reliable activation system, OxiFlo[®] Oxidizer can be easily dosed and injected to rapidly neutralize hydrogen sulfide and dissolve common plugging agents such as iron sulfide and many types of polymers.

OxiFlo[®] Oxidizer is also a safer alternative for the environment and well site personnel. It immediately neutralizes H₂S, and does not react with organics to form carcinogens, ultimately breaking down to simple table salt.

Key Features and Benefits

- High oxidation capacity against hydrogen sulfide (H₂S) and iron sulfide (FeS)
- Breaks down polymers and gels
- Rapidly neutralizes H₂S and dissolves FeS
- Safer for the environment and onsite personnel
- Degrades to table salt
- Does not form harmful chlorination by-products
- Stabilized for safer storage and transport
- Effective over a broad pH range (1–10)
- Improves the effectiveness of acid treatments
- Effective in high-organic loads



Untreated
Completely coated with scale & biofilm.



Treated with Acid Only
Scale protected under biofilm not removed.



**Treated with Acid and
OxiFlo[®] Oxidizer**
All biofilm and scale removed.

Established Reputation

Chlorine dioxide has an established reputation in the oilfield as an effective remediation solution for sulfide contamination in production, injection and disposal wells. A powerful but highly selective oxidizer, it is also used to eliminate sulfide deposits, biofilm and polymer residues in pipelines, separators, storage tanks, surface pits and other locations where sulfides form or accumulate. Left untreated, sulfide accumulations often cause corrosion in tubulars and surface and downhole equipment, resulting in increased repair costs and decreased return on investment. Sulfide and biofilm deposits can also significantly reduce the flow of oil and gas in production wells and reduce injectivity in injection wells.

Customized Concentration Blend

CES customizes the application and dosage level based on the individual well requirements. This highly engineered approach eliminates possibility of overdosing or underdosing.

For sulfide control and biofilm removal in injection wells, OxiFlo[®] Oxidizer can be applied continuously at a dosage slightly higher than the sulfide's oxidative demand, as determined by a demand study. In conjunction with acid cleanup treatments, OxiFlo[®] Oxidizer is typically applied at a higher dosage up to 3,000 ppm available ClO₂, based on well-specific requirements.

Chemical Properties

Active Ingredient	Chlorine dioxide 5% vol/vol
Appearance	Clear, colorless liquid
Odor	Very faint chlorine odor
EPA Toxicity	Category III
Boiling Point	221 °F
Freezing Point	25.2 °F
Solubility	Complete in water or brine