AcroClear® Sulfide Controller
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Highly Effective Acrolein-Based H$_2$S Scavenger and Iron Sulfide Dissolver
Outperforms Conventional Solutions

AcroClear® acrolein-based H$_2$S scavenger and iron sulfide dissolver consistently outperforms conventional chemical solutions, providing highly effective removal of iron sulfide in production and injection wells, and repairing near-wellbore damage caused by iron sulfide deposits and previous acid-jobs. It is also effective in removing iron sulfide-based deposits on pipelines or tubular surfaces, exposing the surface area for an effective corrosion-inhibitor application.

AcroClear H$_2$S scavenger and iron sulfide dissolver is water- and oil-soluble, so it can penetrate oily coatings on iron sulfide particles, and can clarify black water and rid discharge of surface-sheening iron sulfide solids. Unlike acid or THPS treatments, AcroClear H$_2$S scavenger and iron sulfide dissolver is noncorrosive and does not affect the system pH, nor is it affected by iron concentrations.

The highly reactive dissolver works quickly, completely and irreversibly. The extremely rapid reaction between AcroClear H$_2$S scavenger and iron sulfide dissolver and H$_2$S can be an advantage when retention time is an issue.

Administered only by trained, Certified AcroClear Technical Specialists (CATS), AcroClear H$_2$S scavenger and iron sulfide dissolver treats at much lower rates than other specialty chemicals, providing a cost-effective dissolver with less environmental impact due to its very short half-life. Although it requires special handling, AcroClear H$_2$S scavenger and iron sulfide dissolver degrades rapidly in water to become nontoxic 3-Hydroxypropenal, making it relatively easy to meet environmental requirements for offshore overboard water disposal and air permits.
**Features**

- Water- and oil-soluble, to penetrate and dissolve oil-wet iron sulfide particles, producing cleaner oil and water
- Scavenges H₂S and iron sulfide effectively in both oil and water systems
- Low adverse environmental impact due to rapid degradation
- Quick reaction with H₂S eliminates odors and related safety hazards
- Helps remove H₂S from oil and gas, which can eliminate H₂S-related costs such as fines, sales-price penalties and shut-downs to yield higher revenues

**Benefits**

- Helps reduce operational and capital expenses caused by H₂S and iron sulfide issues
- Cost-effective solution treats at much lower concentrations than other options
- Reduces under-deposit corrosion by penetrating and removing iron sulfide deposits to provide a clean surface for optimum corrosion inhibitor protection
- Remediate near-wellbore damage caused by iron sulfide deposits in both production and injection wells
- Eliminates iron sulfide-stabilized oil-water interface pads in separators and tanks, to help optimize process efficiency
- Improves injectivity by solubilizing iron sulfide solids in fluids and the reservoir

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**AcroClear Sulfide Controller Tank**

The patent pending AcroClear H₂S scavenger and iron sulfide dissolver tank design from Multi-Chem incorporates a satellite-based temperature monitoring system that detects any polymerization or contamination of the product. In the event of a temperature excursion, the GPS transmitter immediately notifies key Multi-Chem response personnel. The AcroClear H₂S scavenger and iron sulfide dissolver field tanks are built to meet extremely high quality standards.

- Protective cover and cage to protect valves and connections, minimizing risk of accidental contact
- Internal temperature probe linked to real-time tank tracking system
- Solar powered real-time GPS tracking device
- Lifting lug capacity 3X maximum gross weight
- Tank built to UN T22 specifications, including 10mm thick steel shell
- Integrated fork-lift pockets
- 24/7 emergency contact information
Results From the Field
Diagram 1—Sample water from an operator’s SWD well, left, is transformed after using AcroClear scavenger and iron sulfide dissolver to help improve water quality and prevent formation plugging. As a result, over three months the need for filter changes dropped from as many as three per day to just one per month.

Diagram 2—With use of AcroClear H₂S scavenger and iron sulfide dissolver to inhibit corrosion and prevent iron sulfide deposits on a Permian Basin operator’s production well, failure rates dropped significantly.

Commitment to Safety
AcroClear H₂S scavenger and iron sulfide dissolver’s primary ingredient, acrolein, is highly reactive and requires special handling and application expertise. Multi-Chem employees receive an annual comprehensive AcroClear H₂S scavenger and iron sulfide dissolver treatment awareness training. Field personnel receive additional in-depth application training. Multi-Chem also provides training to customers to increase awareness of the proper application of AcroClear H₂S scavenger and iron sulfide dissolver in mitigating H₂S and iron sulfide. In addition, all AcroClear H₂S scavenger and iron sulfide dissolver applications are subject to unannounced audits to assure strict adherence to Health, Safety and Environment (HSE) procedures.

Certified AcroClear Technical Specialist (CATS)
AcroClear H₂S scavenger and iron sulfide dissolver is handled only by certified Multi-Chem personnel. Select employees from each region are chosen to become CATS—candidates are highly technical and conscientious individuals with exemplary safety records. Once selected, CATS complete a comprehensive program of field and classroom training to obtain their AcroClear H₂S scavenger and iron sulfide dissolver certification.

Water Quality Reduces Filter Changes and Prevents Formation Plugging

Effectiveness of Corrosion Inhibition Program by Helping Remove Iron Sulfide Deposits

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Diagram 2

For more information, please contact your local sales representative or e-mail multichem@halliburton.com