Intellichem® HR: H₂S Removal Technology
Intellichem® MR: Mercaptans Removal Technology

Intellichem HR and Intellichem MR are a water-soluble multicomponent blend of actives, hydroxyls in a complex stabilized alcohol system. This product is extremely effective in removing H₂S and mercaptans from gas streams, off gas, water, crude, NGL, hydrocarbon condensates, fuel oils and many other streams.

Despite what the name infers, the technologies are not scavengers in chemical terms. The proprietary formulation is more defined as a removal technology since it does not act by “scavenging” the H₂S or mercaptans molecules. It rather converts the H₂S and mercaptans irreversibly and instantaneously into a stable non-hazardous, water soluble sulfate salts (SO₄²⁻) and other related species. This eliminates the many issues and detrimental effects in the process system often associated with triazine-based and other scavengers that leave reaction products in the hydrocarbon phase. It is also more effective than caustic for mercaptans removal. The product is also effective in the removal of light mercaptans.

Intellichem HR and Intellichem MR are non-corrosive liquids which is compatible with most production chemicals and materials. The chemical requires very little retention time as the reaction from H₂S (and mercaptans) is instantaneous and, most importantly, this reaction is irreversible and stable.

The product can be injected directly down well, at the well head or anywhere along the production process. It can be also used in the gas phase. CO₂ is also removed. Efficient mixing and contacting of the chemical with the hydrocarbon fluid is vital for obtaining high removal yields. The product can also be used in combination with the Exion® Selective Separation System.

Benefits
The amount of product required to remove H₂S or mercaptans from any stream is typically around 40% less than that of a triazine-based scavenger and caustic. The reaction is instantaneous, stable and irreversible. All the resulting reaction products are non-toxic water-soluble salts that can be easily separated and effortlessly handled.

For additional information about Nexo Solutions please contact us via email at info@nexosolutions.com or also visit our website at www.nexosolutions.com