ProDec

Decontamination Solutions to H_2S and LEL Hazards

ProDec is a proprietary formulation which contains alcohol ethoxylated and enzymatic based compound in a complex detergent system. It is designed to effectively eliminate Hydrogen Sulfide and Iron Sulfide produced by sour system during plant turnaround and storage tank decontamination works.

During plant turnaround when columns and vessels are exposed to atmosphere, the presence of hydrocarbon residues, coke and pyrophoric iron sulfide contribute the most to fire hazard during mechanical works. ProDec minimize the fire hazard during decontamination works by converting pyrophoric iron sulfide into inert iron sulfate and sulfite.

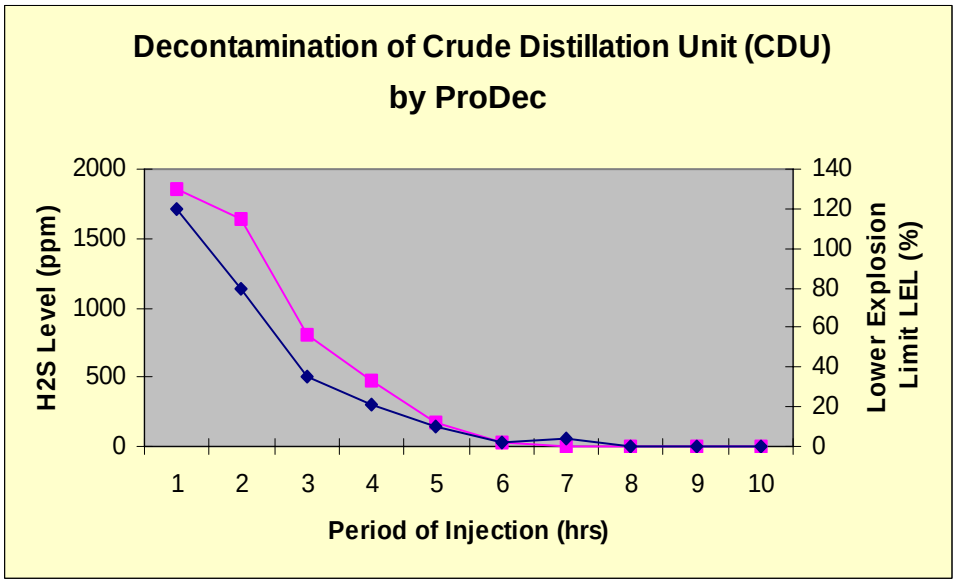
ProDec delivers high assurance of safety for maintenance works dealing with H_2S issues. It is water soluble and performs at a wide range of temperatures, it is proven effective for system contains up to 10,000 ppm of H_2S.

Performance Features

- Converts H_2S into soluble byproduct for removal.
- Freeze stable.
- Performs both in low or high temperatures.
- Can be diluted up to 1:500
- Low COD of effluent and can be safely discharged to ETS.
- Greater efficiency than standard chemicals used to inhibit sulfur compounds
- Can be applied in sour oil or gas process system and vessel.
- Water soluble.
- Converts Iron Sulfide scale into inert compound.
- Act as a corrosion inhibitor in some systems.
- Can act as a soil degreasing.

Result

Performance of ProDec (High Temp) at the Crude Distillation Unit during decontamination process.



Revised 3/2/2009

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Application

ProDec is typically applied neat. Continuous or batch application is recommended with circulation and steaming techniques. The process systems shall start with the ratio of 1: 250 of ProDec and Water or Steam. For storage tank, the ratio of 1:400 is satisfactory. The period of circulation required depends on the ProDec ratio and the right operating temperature. Generally ProDec is applied by circulation technique for a period between 8-12 hours. Actual volume required depends on the level of H_2S presence, field conditions and system dynamics. For further information please consult our technical representative.

Packaging and Distribution

Available in 209 liters returnable drum.

Safety and Handling

Avoid contact with skin or eyes. Wash off skin and irrigate eyes with plenty of water in case of accidental splashes occur. Wear appropriate protective clothing. Material Safety Data Sheets is available upon request.

Typical Physical Properties

Operating Temperature ..... Min 25°C to Max 250 °C
Physical State ..... Liquid (water base)
Boiling Point .....101 °C
Flash Point ..... Non-Flammable
Evaporation Rate ..... Not determined
Density ..... 0.992 – 1.080 kg/L @ 25 °C
Appearance ..... Green Liquid
Odor ..... Mild Cinnamon
pH .....5.5 – 6.5