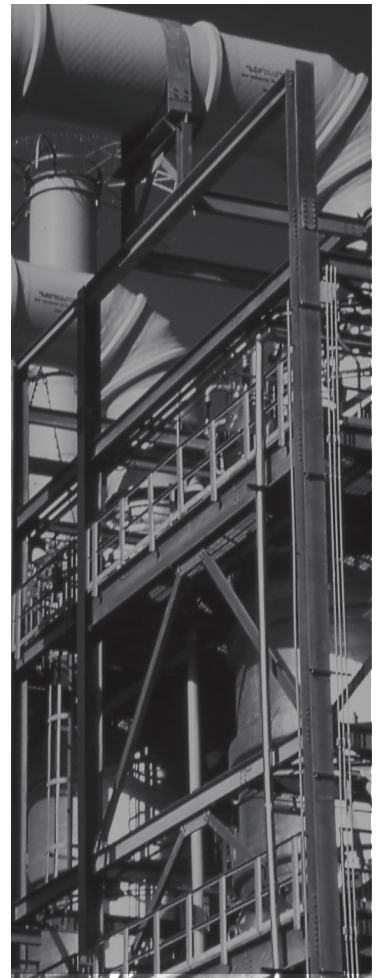


PARATENE®

Vapour Phase Degreasing

Render vessels and tanks free of hazardous components for safe entry.

CleanHarbors®





What is Vapour Phase cleaning?

Steam has been used to purge vessels and towers in refineries since the beginning of the industrial age. Vapour Phase cleaning systems were introduced in the 1950s to improve cleaning efficiency and reduce the amount of steam required. The goal of this type of decontamination treatment is to render vessels and tanks free of hazardous components (such as hydrocarbon vapours and pyrophoric materials) allowing for safe entry.

What is accomplished with just steam?

- Lighter hydrocarbons are flashed off
- Promotes removal of H₂S
- Water wetting of pyrophoric materials
- Some BTEX carried away with condensate, or flashed off

PARATENE® Vapour Phase Degreasing

Paratene® D740

Water-based Degreasing Surfactant

Paratene® D740 is a blend designed to act as a mild oxidizing agent to aid in the removal of hydrogen sulfide and pyrophoric iron compounds, while emulsifying hydrocarbons when applied in hot steam from process equipment and tanks.

Paratene® D740 is mixed with water or alkaline solutions to form a cleaning solution which is applied as a spray or mist within a steam line. Paratene® D740 is paired with alkaline additives, such as trisodium phosphate and sodium hydroxide, to improve removal of H₂S from sour systems.

Features and Benefits

- Reacts with H₂S, pyrophorics and mercaptans to render them inert
- Wets all surfaces, allowing efficient removal of light hydrocarbons
- Emulsifies BTES prevent emission

Paratene® D742

Vapour Phase Micro-emulsion Degreaser

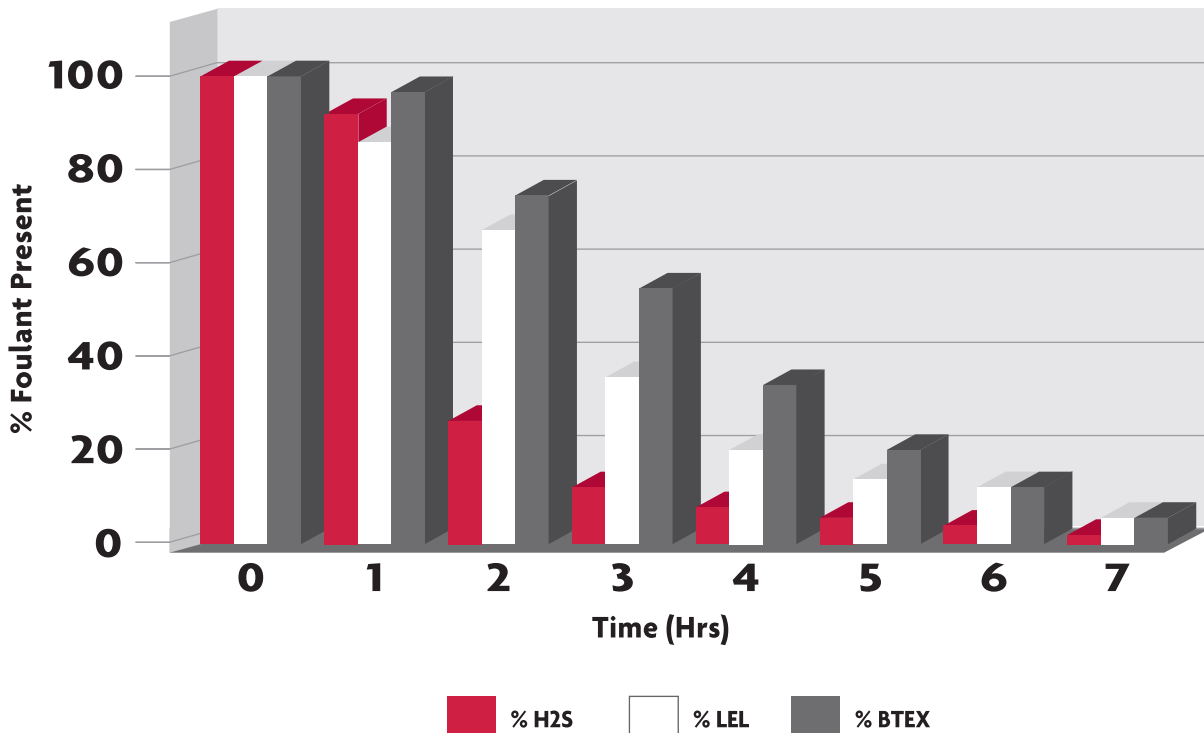
Paratene® D742 is a unique blend of surfactants and solvents designed to aid in the removal of hydrocarbon contaminants from process equipment. Paratene® D742 acts to wet metal surfaces and emulsify hydrocarbons within a steam line, where water or surfactants alone are not effective. Paratene® D742 contains no inorganic compounds and is completely soluble in water.

Paratene® D740 is mixed with water or alkaline solutions to form a cleaning solution which is applied as a spray or mist within a steam line. Paratene® D742 is paired with alkaline additives to improve hydrocarbon removal rates up to 20%.

Features and Benefits

- Contains solvents that aid in the removal of heavy hydrocarbons and solids
- Non-flammable solvents lower the viscosity of the heavy hydrocarbons
- Leaves all metal surfaces water wet

Reduction of Significant Foulants





PARATENE® Vapour Phase Degreasing
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