



H₂S SCAVENGERS

H₂S removal by scavengers

Due to the impact corrosive damage has on operational reliability, the removal of sulfides is of the utmost importance for the Oil & Gas Industry. A quick and efficient removal of hydrogen sulfide from sour gas streams and sour hydrocarbon liquids is hence key to a safe and successful refining operation.

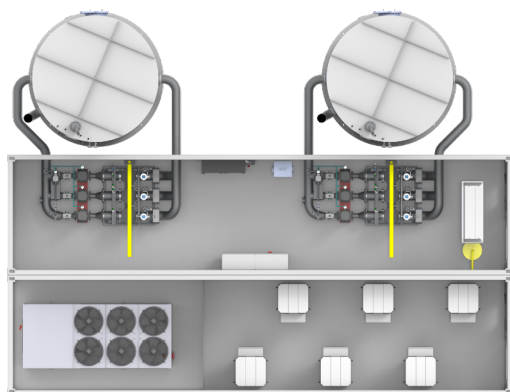
Employing chemical scavengers, such as different formaldehyde based types, is a common and highly suitable method.

PRODUCTS TREATED FOR H₂S

- | | |
|-------------------|------------------------|
| ✓ Produced fluids | ✓ Surface cleaning |
| ✓ Gases | ✓ Oilfield water flood |

Problems related to formaldehyde

Aside from its toxicity to aquatic life and the health effects related to the exposure of humans and animals, formaldehyde can affect the operability of certain refining processes as it can lead to undesired polymerization and as a result to the clogging of pipes, vessels and other components.



a3op - the solution

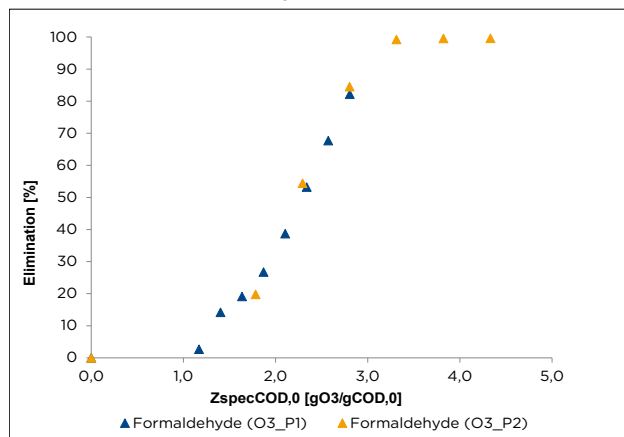
up2e!'s acoustically activated AOP process (a3op®) is a technology platform, capable of degrading and thus eliminating the problems known to be related to formaldehydes in aqueous solutions. Full degradation can be achieved.



a3op - why is it the better solution?

up2e!'s a3op® wastewater treatment yields several important advantages. The operation at ambient temperature and pressure eliminates safety concerns relating to high temperature and pressure operations. The a3op® technology platform is modular by design and flexible to accommodate for adjustments caused by variations in waste stream profiles.

Elimination of formaldehyde - ozone dose based on COD



Formaldehyde values in the range of 170mg/l

KEY ADVANTAGES:

- ✓ Safe process (ambient pressure & temperature)
- ✓ Low maintenance & personnel demand
- ✓ Easy to operate & control
- ✓ Economically advantageous