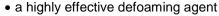
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TASK[™] Defoamer Surfactant-Enhanced Aquifer Remediation

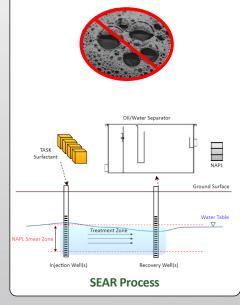




- Foam control at concentrations as low as 0.05-1.0%
- Compatible with TASK™ Surfactants
- Non-corrosive, non-toxic, non-flammable
- Used in wastewater treatment and surfactant mixing systems



Foam issue experiments on membrane processes for SEAR such as surfactant ultrafiltration for surfactant recycling and air stripping for volatile organic compound removal in waste streams



Principle

Some surfactants can act as antifoams (prevent foam formation) or defoamers (break existing foams) due to displacement of water-soluble surfactants from the air – water interface, resulting in inelastic adsorbed monolayers, poor foam formation and poor resistance of an existing foam to rupture upon stretching (due, for example, to mechanical vibrations).

Tersus TASK[™] defoamer is a silicone oil-based defoamer because it is an excellent defoaming agent with high and low temperature performance that is compatible with our TASK[™] Surfactant formulations.

Advantages

- Strong defoaming
- Low dose
- Compatible
- Low cost

Field Application Design

A typical dose ranges between 200 and 500 ppm to control and/or avoid foam formation during surfactant mixing, total fluid extraction, and water treatment applications (such as liquid ring vacuum pumps, air strippers, settling tanks, etc.). Optimal dosing should be confirmed through field-condition testing.

Surfactant-induced foam formation can reduce the efficiency of contaminant air stripping processes. Several methods can be used to mitigate the foaming potential. The air to water ratio can be decreased to avoid high foam formation in the column. However, lowering the air to water ratio will decrease the efficiency of the system, thereby increasing the required tower height. The use of hollow fiber columns can mitigate the foaming problem. Antifoams can also be used to mitigate the problem without lowering the air flow rates.

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Product Content

Chemical Name	CAS Number	Composition (% wt)
Mixture of silicone emulsion	63148-62-9,	40
Polydimethylsiloxane and Synthetic amorphous silica	112926-00-8	
Additives		

Product Characteristics

Parameter	Specification	
Specific Gravity	0.98	
Solubility in water	Dispersible	
Flash Point	No data available	
Appearance	White, milky	

Packaging Options 5-gallon pails 55-gallon drums