

EnviroGem[®] AE Series Surfactants

Designed for the dynamic processing of the oil and gas industry, Air Products' EnviroGem AE series are readily biodegradable (by OECD 306 standards), low-foam wetting agents based on Gemini surfactant technology.

Used alone or as a component in formulations, these surfactants will provide surface tension reduction, foam control, and improved wetting in a variety of systems. Efficacy is expected in the following applications:

Drilling:

- Dispersion of clays and drill cuttings
- ROP enhancers
- Emulsifiers and demulsifiers
- Surface wetting and surface tension reduction
- Shale stabilizers
- Enhanced hydration or dissolution of solid additives

Cementing, Stimulation and Workover:

- Spacers
- Cement dispersion, de-air entraining and defoaming
- Cement retardation
- Fracturing fluids
- Stimulation of coal bed methane
- Surface or interfacial tension reduction
- Oil/water wetting
- Cleaning fluids

Production:

- Rig wash chemicals
- Crude defoaming
- Water flooding/injection
- Defoamers for acid gas sweetening
- Oil/water separations
- Enhanced oil recovery
- Inhibitors or dispersants for asphaltenes, hydrates, scale and waxes