

DePHOS QSA-90

DePHOS QSA-90 is a 75% active, anionic, high foaming phosphate ester in free acid form. This is an economical surfactant providing detergency, emulsification and wetting. It can be used as a 1:1 replacement for more expensive phosphate esters that are 100% active.

SPECIFICATIONS

Appearance @ 25°C:	Clear, yellow viscous liquid
Color (Gardner):	3 max.
% Solids:	74% - 76%
pH (10% in DI water):	< 2.5
Acid Value #1 (pH 5.0 - 5.5):	140 – 160
Acid Value #2 (pH 9.0 - 9.5):	270 – 290

SOLUBILITY: DePHOS QSA-90 is soluble in water, alcohols and glycols. It is dispersible in aliphatic, aromatic and chlorinated solvents and insoluble in mineral oil and other oils.

TYPICAL PROPERTIES

Density @ 25°C	~1.09 g/ml
% Phosphoric Acid	5.0 -7.0

- Excellent stability in acid & alkali
- Exceptional electrolyte stability
- High foaming hydrotrope
- Emulsifier
- Detergency & wetting agent
- Economical

APPLICATIONS

- High alkaline cleaners
- Wax strippers
- Oven cleaners
- Metal cleaners
- High foaming oil field products
- Floor cleaners
- Steam cleaners
- Car wash formulations
- Textile wetting agent

Draves Wetting

Draves Wetting was determined at 0.1% by weight in deionized water at ambient temperature. DePHOS QSA-90 has "instant" wetting vs. DePHOS RA-60 with a wetting time of 22 seconds.

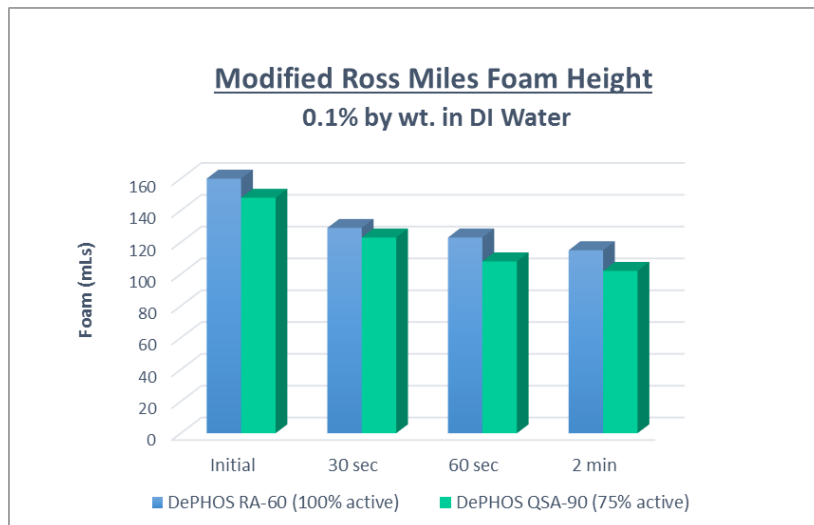
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Modified Ross-Miles Foam Height

Foam height was determined at ambient temperature at **0.1% by weight** in deionized water via graduated cylinder shake test. DePHOS QSA-90 has nearly the same foam profile as DePHOS RA-60, which is a 100% active phosphate ester.



Hydrotrope Properties

The hydrotrope properties of DePHOS QSA-90 were compared to DePHOS RA-60 in various electrolyte solutions. Each sample was heated to the temperature at which the NPE-9 clouds out of solution.

Test solutions consisted of 3.75% by wt. hydrotrope, 5.0% by wt. NPE-9 & 91.25% by wt. electrolyte solution.

