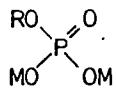


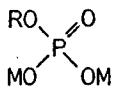
R:  $(\text{CH}_2\text{CH}_2\text{O}-)_n\text{R}'$   
 $\text{R}': \text{alkyl or alkylphenyl}$

Alkyl(alkylphenyl,  $C_{8\sim 20}$ )polyoxyethylene phosphate



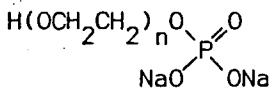
R:  $(\text{R}'\text{O})_n\text{R}''$   
M: Na, K, 1/2Ca  
 $\text{R}': \text{alkylene}$   
 $\text{R}'': \text{alkyl or alkenyl}$

Salts(Na, K, Ca) of alkyl(or alkenyl)( $C_{1\sim 24}$ ) polyoxy-alkylene phosphate

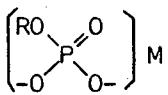


R:  $(\text{R}'\text{O})_n\text{H}$   
M: H, Na, K, 1/2Ca  
 $\text{R}': \text{alkylene}$

Polyoxyalkylene phosphate and its salts(Na, K, Ca)  
(n=1~150)

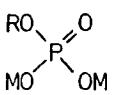


Sodium salt of polyoxyethylenephosphate



R:  $(\text{CH}_2\text{CH}_2\text{O})_n\text{R}'$   
M: Mg, Ba, Zn  
 $\text{R}': \text{alkyl or alkenyl}$

Metallic salts(Mg, Ba, Zn) of alkyl(or alkenyl)( $C_{6\sim 24}$ ) polyoxyethylene phosphate



R:  $(\text{CH}_2\text{CH}_2\text{O})_n\text{R}'$   
M: H, Na, K  
 $\text{R}': \text{alkyl or alkenyl}$

Alkyl(or alkenyl)( $C_{8\sim 24}$ )polyoxyethylene phosphate and its salts(Na, K) (n=2~20)