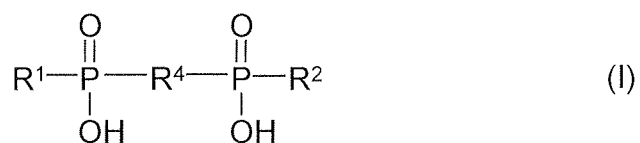


Abstract

Mixtures of diphosphinic acids and alkylphosphonic acids, a process for
 5 preparation thereof and use thereof

The invention relates to mixtures of at least one diphosphinic acid of the formula (I)

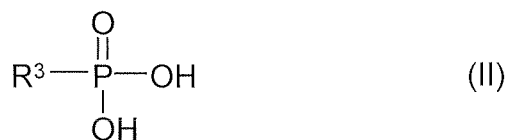


in which

R^1, R^2 are each H, $\text{C}_1\text{-C}_{18}$ -alkyl, $\text{C}_2\text{-C}_{18}$ -alkenyl, $\text{C}_6\text{-C}_{18}$ -aryl, $\text{C}_7\text{-C}_{18}$ -alkylaryl

R^4 is $\text{C}_1\text{-C}_{18}$ -alkylene, $\text{C}_2\text{-C}_{18}$ -alkenylene, $\text{C}_6\text{-C}_{18}$ -arylene, $\text{C}_7\text{-C}_{18}$ -alkylarylene

15 with at least one alkylphosphonic acid of the formula (II)



in which

R^3 is H, $\text{C}_1\text{-C}_{18}$ -alkyl, $\text{C}_2\text{-C}_{18}$ -alkenyl, $\text{C}_6\text{-C}_{18}$ -aryl and/or $\text{C}_7\text{-C}_{18}$ -alkylaryl; a

20 process for preparation thereof and use thereof.