

**MOLECULES HAVING ONE HYDROPHOBIC GROUP AND TWO
IDENTICAL HYDROPHILIC IONIC GROUPS AND COMPOSITIONS
THEREOF**

ABSTRACT OF THE DISCLOSURE

A novel class of compounds is described here. The disclosed novel compounds have one hydrophilic group and two identical hydrophilic ionic groups. The two hydrophilic groups of the disclosed compounds contain or end with a cationic or anionic charged group. A method to synthesize the disclosed novel compounds is also described. The disclosed novel compounds herein can be used as surfactants in an article, product, or composition, or for some other purposes. Also disclosed herein are the corrosion control compositions comprising di-cationic or di-anionic compounds and methods of using thereof in a corrosion control composition to reduce corrosion of a surface in a water system. The disclosed methods or compositions are found to be more effective than those methods or compositions including commonly used single quaternary compounds for mitigating corrosion for a metal surface in water systems.

[Figure 1A]