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Aggregation behavior, anticorrosion effect, and antimicrobial activity of alkylmethylmorpholinium bromides

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Abstract

Quaternary ammonium derivatives containing a morpholinium moiety in the head group and exhibiting micelle-forming activity have been synthesized and characterized. These compounds exhibit poly-functional properties: they efficiently inhibit hydrogen sulfide and combined (H₂S and CO₂) corrosion of steel, are characterized by strong bactericidal activity against sulfate-reducing bacteria, and possess pronounced bacteriostatic and fungistatic effects. © 2014 Pleiades Publishing, Ltd.

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