

Title (en)
CONTROLLED POLYALKOXYLATION METHOD OF FATTY AMINES

Title (de)
GESTEUERTES POLYALKOXYLIERUNGSVERFAHREN VON FETTAMINEN

Title (fr)
PROCÉDÉ DE POLYALCOXYLATION CONTRÔLÉE D'AMINES GRASSES

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Abstract (en)
[origin: WO2015114034A1] The present invention provides methods of preparing quaternary fatty ammonium polyalkoxylates having 2 (nearly) symmetrical alkoxy chains in a one-pot reaction under anhydrous conditions comprising the steps of (i) alkoxyating a primary fatty amine under anhydrous conditions in the absence of a catalyst using a suitable alkoxylation agent to obtain a (nearly) symmetrical tertiary fatty amine N,N-alkoxyate, (ii) extending the N,N-alkoxyate groups by reacting the (nearly) symmetrical tertiary fatty amine N,N-alkoxyate with a suitable alkoxylation agent in the presence of a basic catalyst (under controlled temperature and pressure conditions) to obtain a (nearly) symmetrical tertiary fatty amine N,N- polyalkoxyate, and (iii) reacting the (nearly) symmetrical tertiary fatty amine N,N- polyalkoxyate with a suitable alkoxylation agent under neutral to acidic conditions to obtain the desired quaternary fatty ammonium polyalkoxyate.

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