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(54) Title: ADDITIVE COMPOSITION FOR CONTROL AND INHIBITION OF POLYMERIZATION OF ALIPHATIC MONOMERS, AND METHODS OF PREPARATION AND USE THEREOF

(57) Abstract: The present invention relates to additive composition and method of use thereof for controlling and inhibition of polymerization and dimerization of aliphatic monomers including butadiene comprising A) one or more of first component selected from a group comprising a) quinone methide (QM), b) quinone methide (QM) derivative including ester derivative of quinone methide, c) nitroxide (i.e. nitroxyl) compounds, and d) mixture thereof; characterized in that the composition further comprises B) one or more of second component selected from amines or polyamines, wherein the amine and polyamine is selected from a group comprising i) oxide treated tertiary amines, ii) hydroxyl alkyl tertiary amines, iii) polyether amines, and iv) mixture thereof. In one embodiment, the present invention also relates to a method for controlling and inhibiting polymerization and dimerization of aliphatic monomers including butadiene by employing the presently provided compositions, and in another embodiment, the present invention relates to a method of preparation of the presently provided compositions.

