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(54) Title: SYNTHESIS OF 7-ACETYLENO QUINONE METHIDE DERIVATIVES AND THEIR APPLICATION AS VINYLIC POLYMERIZATION RETARDERS

(57) Abstract: The invention provides a method for synthesizing 7-Acetyleno quinone methide compounds that is safe and inexpensive. The method avoids the need for extremely cold reaction temperatures and unlike the prior art does not require any highly explosive materials. The method comprises the steps of: a) performing a condensation reaction between 3,5-di-tert-butyl-4-hydroxybenzaldehyde and a secondary amine thereby forming a secondary amine quinone methide intermediate; b) removing water from the secondary amine quinone methide intermediate by azeotropic distillation; c) adding the dehydrated secondary amine quinone methide intermediate to an organic medium containing a metal acetylide to form a Mannich base intermediate; and d) adding a release agent to the Mannich base intermediate to yield a 7-Acetyleno quinone methide.

