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(54) Title: CHLORATE-CONTAINING STABILIZER SYSTEM WITH NITROGEN-CONTAINING SYNERGISTS FOR STABILIZING HALOGEN-CONTAINING POLYMERS

(54) Bezeichnung: CHLORATHALTIGES STABILISATORSYSTEM MIT STICKSTOFFHALTIGEN SYNERGISTEN ZUR STABILISIERUNG VON HALOGENHALTIGEN POLYMEREN

(57) Abstract: The invention relates to stabilizer systems, containing at least: a) a perchlorate salt; b) at least one or more compounds from the group consisting of carbamides, indole derivatives and enamines of formula (I), wherein $n = 1$ or 2 and $X = O$ or NR^1 ; $n = 3 - 6$ and $X = O$; $R^1 = H$, C_1-C_4 -alkyl, C_2-C_6 -alkenyl, C_6-C_{10} -aryl, C_7-C_{18} -alkaryl or C_7-C_{18} -aralkyl; R^2 (if $n = 1$) = C_1-C_{22} -alkyl, C_2-C_{22} -alkenyl or aryl, preferably phenyl, optionally substituted with up to 3 hydroxy, C_1-C_4 -alkoxy or C_1-C_9 -alkyl; or R^2 (if $n = 2 - 6$) = linear or branched C_{1-22} -alkylene, optionally interrupted by one or more O or S atoms, wherein R^2 (if $n = 3$) can also be a C_2-C_3 -alkyl trisubstituted isocyanurate; if $X = NH$ R^2 can also be H. Said stabilizer systems are suitable for stabilizing halogen-containing polymers, more particularly PVC.

(57) Zusammenfassung: Es werden Stabilisatorsystem beschrieben, enthaltend mindestens a) ein Perchlorat-Salz und b) mindestens eine oder mehrere Verbindungen aus den Gruppen der Harnstoffe, der Indol-Derivate und der Enamine Der Formel (I) vornn bedeuten $n = 1$ oder 2 und $X = O$ oder NR^1 , $n = 3 - 6$ und $X = O$; $R^1 = H$, C_1-C_4 -Alkyl, C_2-C_6 -Alkenyl, C_6-C_{10} -Aryl, C_7-C_{18} -Alkaryl oder C_7-C_{18} -Aralkyl; R^2 (für $n = 1$) = C_1-C_{22} -Alkyl, C_2-C_{22} -Alkenyl oder Aryl, bevorzugt Phenyl, gegebenenfalls mit bis zu 3 Hydroxy, C_1-C_4 -Alkoxy oder C_1-C_9 -Alkyl substituiert; oder R^2 (für $n = 2 - 6$) = lineares oder verzweigtes C_{1-22} -Alkyl, gegebenenfalls durch 1 oder mehrere -O- oder -S-Atome unterbrochen, wobei R^2 (für $n = 3$) auch C_2-C_3 -Alkyl-tri-substituiertes Isocyanurat sein kann, wenn $X = NH$ kann R^2 auch H sein, die sich zum Stabilisieren von halogenhaltigen Polymeren, insbesondere PVC, eignen.

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