

Preparation of colored melamine-formaldehyde condensation products

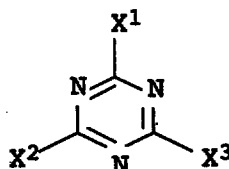
5 Abstract

A process for preparing colored melamine-formaldehyde condensation products by mixing pigments or dyes into a reaction mixture comprising starting compounds for preparing the
10 melamine-formaldehyde condensation products comprises

(A) dispersing a mixture consisting essentially of

(a) a substituted melamine of the formula I

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I,

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where X^1 , X^2 and X^3 are each selected from the group consisting of $-NH_2$, $-NHR^1$ and $-NR^1R^2$, and X^1 , X^2 and X^3 are not all $-NH_2$, and R^1 and R^2 are each selected from the group consisting of hydroxy- C_2 - C_{10} -alkyl,
25 hydroxy- C_2 - C_4 -alkyl-(oxa- C_2 - C_4 -alkyl) $_n$, where n is from 1 to 5, and amino- C_2 - C_{12} -alkyl, or mixtures of melamines I, and

30 (b) if desired, formaldehyde or formaldehyde-supplying compounds in a molar ratio of formaldehyde to melamines I within the range from 40:1 to 0,

(c) a pigment or dye, and

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(d) if desired, phenol, unsubstituted or substituted by radicals selected from the group consisting of C_1 - C_9 -alkyl and hydroxyl, C_1 - C_4 -alkanes substituted by 2 or 3 phenol groups, di(hydroxyphenyl) sulfones or
40 mixtures thereof,

the pigment or dye being added in an amount within the range from 0.01 to 30% by weight, based on (a) and (b), and the phenol in an amount within the range from 0 to 5 mol%, based
45 on (a) and (b),

by intensive stirring until there are no longer any pigment agglomerates $\geq 1 \mu\text{m}$,

and then

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(B) admixing the mixture prepared in (A) with melamine and if desired with further phenol, substituted melamine I and formaldehyde or formaldehyde-supplying compounds, the amounts being chosen so that the molar ratio of melamines (melamine and

10 (a)) to (b) is within the range from 1:1.15 to 1:4.5, the pigment or dye is present in an amount within the range from 0.01 to 5% by weight, based on melamine and (a) and (b), and the phenol is present in an amount within the range from 0 to 5 mol%, based on melamine and (a) and (b), and then condensing in a conventional
15 manner.

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