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(54) Title: TREATMENT OF A COMPOSITION COMPRISING A TRIMETHYLOHALKANE BIS-MONOLINEAR FORMAL

(57) Abstract: A process for treating a composition containing a substantial proportion of trimethylolpropane bis-monolinear formal (TMP-BMLF) or trimethylolethane bis-monolinear formal (TME-BMLF), e.g., a heavy ends residue obtained from the purification of a crude trimethylolpropane (TMP) or trimethylolethane (TME) product, wherein the composition is contacted at an elevated temperature with a strong acid catalyst, e.g., methanesulfonic acid, to produce a composition containing significantly increased amounts of TMP and trimethylolpropane monocyclic formal (TMP-MCF) or TME and trimethylolethane monocyclic formal (TME-MCF) respectively. Also disclosed is a process for reacting TMP-MCF or TME-MCF, either in substantially pure form or as present in the light ends overhead stream obtained in a finishing treatment of crude TMP or TME, with a monohydric or dihydric alcohol, e.g., ethylene glycol, in the presence of a strong acid catalyst to obtain additional TMP or TME and an acetal by-product, e.g., 1,3-dioxolane; and a process for directly reacting the TMP-BMLF or TME-BMLF present in a composition, e.g., the heavy ends residue obtained in the purification of TMP or TME, with a monohydric or dihydric alcohol, e.g., ethylene glycol, in the presence of a strong acid to obtain additional TMP or TME and an acetal by-product, e.g., 1,3-dioxolane.