

METHOD FOR THE PRODUCTION OF HIGHLY FILLED
POLYMETHYL METHACRYLATE BASED PLASTICS

ABSTRACT OF THE DISCLOSURE

A method for the casting of highly filled plastics containing polymethyl methacrylate, the method involving:

- preparing a filler suspension by combining from 30 to 5 80 wt%, based on the amount of filler suspension, of at least one particle-shaped, inorganic filler with a polymer precursor under high-speed stirring, wherein the polymer precursor comprises methyl methacrylate and a polymethyl methacrylate prepolymer, wherein the filler suspension further comprises 10 from 1 to 20 parts by weight, based on the amount of filler suspension, of a colored, filled, comminuted polymer material having a density precisely adapted to the density of the filler suspension and wherein the comminuted polymer material comprises a polymer component which is highly crosslinked; and 15
- polymerizing the filler suspension by contacting the filler suspension with at least one radical initiator.