

POLYOXYMETHYLENE MOULDING COMPOSITIONS WITH IMPROVED
HEAT STABILITY AND STABILITY AGAINST DISCOLORATION

Abstract

Polyoxymethylene moulding compositions of the invention
comprise

- (i) at least one polyoxymethylene homo- and/or copolymer,
 - 5 (ii) at least one conventional additive and
 - (iii) at least one polymeric plastics material as an
additive for improving the heat stability,
- and are distinguished in that
- (iii) is a copolymer which is obtainable by polymerization
 - 10 in bulk of a mixture of
 - A) 60 - 90 parts of one or more (meth)acrylates,
 - B) 10 - 40 parts of one or more (meth)acrylamides,
 - C) per 100 parts of A) + B), > 0.2 to 5 parts of
molecular weight regulator and
 - 15 D) per 100 parts of A) + B), up to 2 parts of
lipophilic free radical polymerization
initiators,
- and in that
- the moulding composition comprises (iii) in an amount of
- 20 0.01 to 2 parts, based on the sum of (i) + (ii)
where all the amounts relate to parts by weight (wt/wt) and
A) and B) together must give 100 parts.

By the use of relatively highly regulated bulk co- or
terpolymerization for stabilizing POM moulding

- 25 compositions, advantages over the use of emulsion or
suspension bead polymerization result in the heat
stability, in the stability against discoloration and/or in
the residual monomer contents of POM moulding compositions
and shaped articles and shaped films produced therefrom.