

POLYAMIDE AND POLYAMIDE COMPOSITION

ABSTRACT

A polyamide (9-T polyamide) comprises a dicarboxylic acid component (a) comprising 60 to 100 mole % of the dicarboxylic acid component of terephthalic acid and a diamine component (b) comprising 60 to 100 mole % of the diamine component of 1,9-nonanediamine, said polyamide having an intrinsic viscosity $[\eta]$ as determined by measurement in concentrated sulfuric acid at 30°C of 0.6 to 2.0 dl/g and having at least 10% of terminal groups thereof blocked. Another polyamide (9M-T polyamide) comprises a dicarboxylic acid component (a) comprising 60 to 100 mole % of the dicarboxylic acid component of terephthalic acid and a diamine component (b) comprising 60 to 100 mole % of the diamine component of 1,9-nonanediamine and 2-methyl-1,8-octanediamine, the molar ratio between said 1,9-nonanediamine and said 2-methyl-1,8-octanediamine being in a range of 60:40 to 99:1, said polyamide having an intrinsic viscosity $[\eta]$ as determined by measurement in concentrated sulfuric acid at 30°C of 0.4 to 3.0 dl/g. These polyamides have excellent moldability, as well as excellent hot water resistance, surface neatness, heat resistance, mechanical characteristics, low-water-absorption property and chemical resistance. Polyamide compositions comprise the 9-T polyamide or 9M-T polyamide and a filler are suitably used as engineering plastics.

