

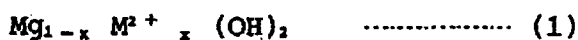
METAL HYDROXIDE AND OXIDE SOLID SOLUTIONS HAVING HIGH ASPECT RATIOS AND THEIR PROCESSES FOR PRODUCTION

ABSTRACT

By hydrating a metal oxide solid solution shown as the following formula (3), wherein an average primary crystal particle diameter is in the range of 1 to 10 μ m, in the presence of monocarboxylic acid and/or oxymonocarboxylic acid in aqueous medium,



in which M^{2+} represents at least one divalent metal ion selected from the group consisting of Mn^{2+} , Fe^{2+} , Co^{2+} , Ni^{2+} , Cu^{2+} and Zn^{2+} , and x is in the range of $0.01 \leq x < 0.5$, a metal hydroxide solid solution having a high aspect ratio shown as the following formula (1) can be obtained;



in which M^{2+} represents at least one divalent metal ion selected from the group consisting of Mn^{2+} , Fe^{2+} , Co^{2+} , Ni^{2+} , Cu^{2+} and Zn^{2+} , and x is in the range of $0.01 \leq x < 0.5$, characterized by that a crystal is a hexagonal plate in shape, 0.01 to 0.5 μ m in average thickness, 1 to 10 μ m in average diameter and not less than 10 in aspect ratio. The metal hydroxide and oxide solid solutions add new functions such as a reinforcing effect on resin, ductility useful for cosmetics and the like and ultraviolet ray absorbancy to functions available for conventional magnesium based metal hydroxide and oxide solid solutions such as a

solutions such as a flame-retardant, an acid neutralizer, an acid acceptor for halogen-containing rubber, a thickener for FRP and the like.