DISCLOSURE ~~OF THE INVENTION~~

It is an object of the present ~~invention~~disclosure to provide a resin composition which overcomes the defects of needle-like basic magnesium sulfate and has good balance among mechanical strength, molding productivity and the appearance of a molded article.

The inventors of the present ~~invention~~disclosure found that when plate-like magnesium hydroxide (component B) and needle-like basic magnesium sulfate (component C) are used in combination with a resin (component A), mechanical strength is reinforced synergistically and the appearance of a molded article is improved and accomplished the present ~~invention~~disclosure.

That is, the present ~~invention~~disclosure is a resin composition comprising

(i) 100 parts by weight of a resin (component A),

(ii) plate-like magnesium hydroxide (component B) having a crystal thickness (y) of 0.2 μm or less and an aspect ratio of 20 to 100, and

(iii) needle-like basic magnesium sulfate (component C), wherein

the total content of the components B and C is 1 to 100 parts by weight based on 100 parts by weight of the resin and the weight ratio of the component B to the component C is 0.1 to 0.9:0.9 to 0.1.

In a first aspect of the present disclosure, there is provided a resin composition comprising

(i) 100 parts by weight of a resin (component A),

(ii) plate-like magnesium hydroxide having a crystal thickness (y) of 0.2 μm or less, a crystal width (x) of 0.5 to 10 μm, and an aspect ratio (x/y) of 20 to 100 (component B), and

(iii) needle-like basic magnesium sulfate (component C) having a width (w) of 0.5 to 1 μm, a length (L) of 20 to 100 μm and an aspect ratio of 20 or more, wherein

the total content of the components B and C is 1 to 100 parts by weight based on 100 parts by weight of the resin, and the weight ratio of the component B to the component C is 0.1 to 0.9:0.9 to 0.1.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 shows an SEM photo of plate-like magnesium hydroxide obtained in Synthesis Example 1;

Fig. 2 shows the schematic shape of plate-like magnesium hydroxide; and

Fig. 3 shows the schematic shape of needle-like basic magnesium sulfate.