(patent document 2) exhibits a satisfactory flame retarding effect even when it is used in an amount of 160 parts or less by weight, it has a problem that the mechanical strength of a molded product thereof deteriorates, thereby greatly impairing the characteristic properties of the resin.

Patent Document 1 JP-A 2000-233924
Patent Document 2 WO2012/050222

SUMMARY

In a first aspect of the present disclosure, there is provided a composite flame retardant containing
(i) 100 parts by weight of magnesium hydroxide particles (A) having an average thickness of 10 to 100 nm, an average width of 2.4 μm or more and an average aspect ratio of 20 to 120 and
(ii) 100 to 900 parts by weight of magnesium hydroxide particles (B) having an average width of 1 μm or less and an average aspect ratio of less than 20.

In a second aspect of the present disclosure, there is provided a resin composition comprising 100 parts by weight of a synthetic resin and 50 to 200 parts by weight of the disclosed composite flame retardant.

In a third aspect of the present disclosure, there is provided a molded article formed from the disclosed resin composition.

In a fourth aspect of the present disclosure, there is provided a flame retardant electric wire cable coated with the disclosed resin composition.

DISCLOSURE OF THE INVENTION

It is an object of the present invention to provide

a composite flame retardant which exhibits excellent flame retardancy, is excellent in dispersibility in a resin and can suppress the deterioration of the mechanical strength of a resin. It is another object of the present invention to provide a resin composition which comprises this composite flame retardant.

The inventors of the present invention found that when magnesium hydroxide (particles (B)) which has been used as a flame retardant is mixed with magnesium hydroxide particles (A) having a high aspect ratio in a certain ratio, a satisfactory flame retarding effect is obtained even with a relatively low content. The present invention was accomplished based on this finding.

That is, the present invention is a composite flame retardant which comprises

(i) 100 parts by weight of magnesium hydroxide particles (A) having an average thickness of 10 to 100 nm, an average width of 2.4 μm or more and an average aspect ratio of 20 to 120 and

(ii) 100 to 900 parts by weight of magnesium hydroxide particles (B) having an average width of 1 μm or less and an average aspect ratio of less than 20.

Further, the present invention is a resin composition comprising 100 parts by weight of a synthetic resin and 50