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[Claim 2]

The rare earth-transition metal alloy sputtering target according to claim 1,

wherein when the void area ratio in the cross-sectional tissue is measured at a plurality of positions on a surface, the variation in the void area ratio as defined by $(S_{max} - S_{min}) / (S_{max} + S_{min})$ is 0.4 or less, where S_{max} is the maximum void area ratio and S_{min} is the minimum void area ratio.

BACKGROUND ART

Charcoal bricks made from beer lees are carbides produced by drying beer lees by dehydration; heat-compressing the dried beer lees into a molded product having an appropriate shape such as a bar; and firing the molded product at an appropriate temperature (usually, 500°C or higher). In particular, when the molded product is fired at a high temperature (600°C or higher), it is possible to obtain a hard white charcoal that is as hard and refined as Bincho charcoal and that produces less powder. In addition, the charcoal brick made from beer lees has a higher ash content (particularly, P and Mg) and a higher nitrogen content as compared to ordinary charcoal, and is suitable for use as a soil improving material or the like. Yet, immersion of the charcoal brick made from beer lees in water will cause dissolution of the phosphorus which is present in an amount of about 2% by weight, highly likely infringing the eutrophication criteria specified by the Environment Agency. Thus, prevention of phosphorus dissolution is necessary for use as a water purification material.

The disintegrant composition of the present invention is a composition for use as a modifier (also referred to as a disintegrator) that improves disintegratability of chemicals (e.g., tablets), such as oral disintegrating tablets and pesticide granular, that disintegrate

by absorbing water to release active ingredients. Oral disintegrating tablets undergo disintegration in the oral cavity when low molecular weight sugars (such as D-mannitol) serving as binding agents of disintegrating tablets are dissolved in water in the oral cavity, reducing the binding capacity. A sugar (B) as one ingredient of the disintegrant composition of the present invention is a highly hydrophilic composition, and thus functions as a water conducting agent that increases the absorption rate of water into the disintegrant composition. The water taken inside by the effect of the sugar (B) quickly swells a water-swelling polymer (A) as another ingredient of the disintegrant composition of the present invention. Pressure generated by volume expansion upon swelling disintegrates the oral disintegrating tablets. This is presumably how excellent disintegratability is exhibited.

(Example 1) Synthesis of polymer containing compound 1 as chain transfer agent

Into a polymerization tube were placed the compound 1 purified in Synthesis Example I (125.5 mg (weighed to obtain a final concentration of the compound 1 of 0.5 M since this is a sample mixed with a trace amount of AIBN)), tBA (218.4 mg, 1.5 M), and 2,2'-azobis (isobutyronitrile) (AIBN) as an initiator (13.14 mg (weighed to obtain a final amount corresponding to 0.16 equivalents of the compound 1, taking into account the amount of AIBN present as impurities in the compound 1)). These components were dissolved in methanol to obtain a total amount of 1 mL. This mixture was subjected to a cycle of freezing, degassing, and fusing three times to bring the polymerization tube to vacuum, and the polymerization tube was sealed. The polymerization tube was placed in an oil bath at 70°C to perform polymerization reaction for six hours. Thus, a polymer was obtained. The obtained polymer was subjected to electrospray ionization mass analysis (ESI-MS). Fig. 14 shows the results. The polymer was also subjected to separation according to the number of monomers using an automatic flash column purification device (Isolera One ISO-1SW available from Biotage Japan Ltd.

Note: tBA denotes tert-butyl acrylate.