

ABSTRACT

The present invention provides a method for producing a material containing modified sulfur with easy control.

5 The method provides excellent mechanical strength, water sealability, ignition resistance, and resistance to sulfur-oxidizing bacteria to the resulting material, enables use of wastes and industrial by-products as aggregate, and provides materials that fulfill properties

10 required for materials for civil engineering and construction. The method includes the steps of (A) mixing in a molten state 100 parts by weight of sulfur and 0.1 to 25 parts by weight of tetrahydroindene at 120 to 160 °C until the viscosity of the resulting molten material

15 at 140 °C falls in the range of 0.05 to 3.0 Pa·s, (B) cooling the molten material down to a temperature not higher than 120 °C to obtain a binding material containing modified sulfur, (C) mixing the binding material containing modified sulfur with aggregate at a weight ratio of 1 to

20 5 : 9 to 5 at 120 to 160 °C to obtain a mixture, and (D) cooling and solidifying the mixture.