

ABSTRACT

The present invention provides a method for producing a binding material containing modified sulfur which gives excellent ignition resistance, mechanical strength, water sealability, and resistance to sulfur-oxidizing bacteria, and which may be usable for sealing domestic and industrial wastes, and a method for producing, with easy control, a material containing modified sulfur using the binding material. The method for producing the binding material includes the steps of providing a starting material for modified sulfur composed of 100 parts by mass of sulfur and 0.1 to 25 parts by mass of ethylidene norbornene (ENB), mixing the starting material in a molten state at 120 to 160 °C, and when the viscosity at 140 °C of the resulting molten mixture falls in the range of 0.050 to 3.0 Pa·s, cooling the molten mixture down to a temperature not higher than 120 °C. The method for producing the material containing modified sulfur includes the steps of, after the binding material is prepared, mixing 10 to 50 mass% of the binding material and 50 to 90 mass% of aggregate at 120 to 160 °C, while the viscosity at 140 °C of the binding material is maintained within a range of 0.050 to 3.0 Pa·s, and cooling the resulting mixture down to a temperature not higher than 120 °C.