

ABSTRACT

The present invention provides a method which enables efficient preparation of a material containing modified sulfur in a molten state of which workability is improved, and a material containing modified sulfur in a solid state of which surface conditions, mechanical strength, water sealability, ignitability, and resistance to sulfur-oxidizing bacteria are improved. The method includes the steps of (A) reacting in a molten state 100 parts by weight of sulfur and not less than 0.1 parts by weight and less than 2 parts by weight of a sulfur modifier under hermetically sealed conditions, and (B1) adding and mixing aggregate to a reaction system containing 5 to 45 wt% molten modified sulfur having a weight average molecular weight of 320 to 500 formed by the reaction in step (A), or (B2) adding and mixing aggregate to a reaction system having a viscosity of 20 to 200 mPa·s at 140 °C and containing a molten modified sulfur having a weight average molecular weight of 320 to 500 formed by the reaction in step (A).

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