

The invention relates to the process for producing thermally expanded graphite intercalation compounds being used mainly for the needs of fire protection and in metallurgical production. The method includes serial processing the natural flaked graphite with concentrated aqueous solution of sodium dichromate, concentrated sulphuric acid, subsequent processing the oxidated graphite with water in stationary, and thereafter in dynamic conditions. The raw product washed with water is thereafter kept in stationary conditions for 1-2 hours in aqueous solution of ammonium hydroxide at the concentration of 0.1-0.2 mole/dm³. Obtained product is repeatedly processed with water in dynamic conditions and dried. Use of this method allows obtaining graphite bisulphate which value of blowing factor at 500°C and 900°C in shock and linear conditions of heating exceeds by 1.2 times the respective values of graphite bisulphate obtained with the prototype method.