

The influence of mechanical activation on the thermal decomposition of peroxides of alkaline earth metals

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Keywords: peroxide, mechanical treatment, differential thermal analysis (DTA).

Abstract

The present paper analyses the mechanical treatment effect on the character of thermal decomposition of calcium peroxide in disintegrator. The appearance of an exothermal peak on the differential thermal analysis curve was detected. It has been found out that while the time of mechanical treatment increases the oxygen release process changes. It has also been established that the mechanical treatment in disintegrator leads to the increased oxygen release at lower temperatures. The comparison of the characteristic features of thermal decomposition of calcium peroxide, strontium peroxide, and barium peroxide has been made.