

PREPARATION METHOD FOR PERFLUORO-2-METHYL-3-PENTANONE AND INTERMEDIATES

ABSTRACT

Disclosed is a preparation method for perfluoro-2-methyl-3-pentanone. In the presence of fluoride salts and ether compounds, perfluoro-2, 3-epoxide-2-methyl pentane is converted into perfluoro-2-methyl-3-pentanone by a catalytic rearrangement reaction, which has characteristics such as mild action condition, fast reaction rate, high reaction selectivity and high yield. The prepared perfluoro-2-methyl-3-pentanone can be used as detergent, solvent and extinguishant. The perfluoro-2, 3-epoxide-2-methyl pentane is prepared by using perfluoro-2-methyl-2-amylene as raw material to react with sodium hypochlorite, and the perfluoro-2-methyl-2-amylene raw material is prepared through the catalytic isomerization reaction by using perfluoro-4-methyl-2-amylene as raw material.