

Biodiesel synthesis from different vegetable oils

Irina NIȚĂ*, Dan MANDALOPOL, Ana Maria MOCANU, Corina TEODORESCU
*Ovidius University, Department of Chemical Engineering and Technology 124 Mamaia Blvd,
900527, Constanta, ROMANIA*

Abstract UE 2003/30/EC Directive establishes that, until the end of 2010, 5.75% of fuels utilized in transportation to be represented by biofuels. Among liquid biofuels, biodiesel produced from vegetable oils is accepted on the european and international market as fuel for engines with internal combustion. It is used blended with diesel oil. Biodiesel defined as monoesters of fatty acids from vegetable oils or animal greases was proved to be a viable alternative to diesel oil, having almost the same characteristics. In this paper are presented the synthesis of biodiesel from palm oil and soya oil at room temperature. The characteristics of biofuel obtained are compared to standard request.

Keywords: biofuels, biodiesel, transesterification, vegetable oil.
