Abstract

2-Fluraldehyde was converted into 2-(5-R-2-furyl)-1, 3-dioxanes; 5-R-2-cyanofurans where $R = H, Br, I$ or NO$_2$; bis(5-bromo-2-furyl-1,2-$R$ diimine where $R = ethyl$ or butyl; and 5-hydroxymethyl-2-furaldehyde. Furfuryl alcohol, obtained from 2-furaldehyde by the Cannizaro reaction, and 5-hydroxymethyl-2-furaldehyde were reacted with hydrogen sulphide to give 2,2'-difurfuryl thioether in 5% yield and thiobis (5-methyl-2-furaldehyde) in 6% yield, respectively. Furfuryl alcohol reacted with 5-hydroxymethyl-2-furaldehyde to yield 5-formyl-2,2'-difurfuryl ether in 6% yield. The dioxanes were found to decompose when stored at room temperature for more than six months, while the other compounds were relatively stable when stored for the same period of time.