

Abstract

5-Hydroxymethyl-2-furaldehyde (HMF, **1**) was produced in 92% yield when d-fructose was dehydrated using dimethylsulphoxide (DMSO) at 150°C for 2 h. The optimum conversion occurred at a d-Fructose: DMSO molar ratio of 8.0. In addition to HMF, small quantities ($\approx 1\%$) of oxobis (5-methyl-2-furaldehyde), **4**, were also obtained from the reaction. The amount of **4** was substantially increased ($\approx 30\%$) when the reaction was carried out in toluene as the solvent with borontrifluoride etherate as the catalyst.