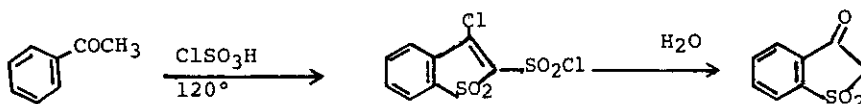


AN INVESTIGATION INTO THE CHLOROSULFONATION  
OF ACETOPHENONE AND SOME DERIVATIVES

Derek D. Chapman  
 Research Laboratories  
 Eastman Kodak Company  
 Rochester, NY 14650

The reaction of acetophenone with chlorosulfonic acid produces as the major isolable product 3-chloro-2-chlorosulfonylbenzo[b]thiophene-1,1-dioxide in contrast to previous reports in the literature. This compound can be converted to benzo[b]thiophen-3-one-1,1-dioxide by hydrolysis.



Certain substituted acetophenones give analogous products while others react without the thiophene ring being formed, generating  $\alpha$ -chloro- $\beta$ -chlorosulfonyl-styrene derivatives.