

USE OF LEAD IONS FOR LACTIC ACID CATALYSIS

ANL

Arthur Possenti*

Michel Brasil da Silva**

Resumo

This study analyzes a conversion of cellulose molecules into lactic acid catalyzed by lead ions II in aqueous medium. The product resulting from this study has high commercial value and is present in various branches of industry. From the literature, it is known that Pb ions provide different paths to the cascade effect. Therefore, a cellulose was tested in a stainless steel reactor, where a cellulose and a catalyst were added not aqueous medium. The reactor was placed in an oil bath to achieve a reaction temperature and kept under constant stirring. After the study time, the reactor was placed in cold water until a reaction was complete. The products were analyzed by liquid chromatography and showed a large amount of products that can be used as dairy fluids from this method, but it is also efficient to catalyze microcrystalline cellulose structures in lactic acid. After work, the catalyst can be recovered using a cation exchange resin.

Keywords: Cellulose conversion. Lead ions II. Latic Acid.

E-mails:

* possenti22@gmail.com

** micbrava@yahoo.com.br