

# Study on Environmental Friendly Dyeing Auxiliary in Leather

*Wei Kuang<sup>1,\*</sup>, Xingfang Lu<sup>2</sup>, Lihong Fu<sup>1</sup>*

<sup>1</sup> School of Light Chemistry and Environmental Engineering, Shandong Institute of Light Industry, Jinan 250353, Shandong, P. R. China

<sup>2</sup> Zhejiang Industry & Trade Polytechnic, Wenzhou 325003, Zhejiang, P. R. China

\*Corresponding Author, Tel: 86-531-89102831, Email:kkwei261@yahoo.com.cn

**Abstract:** The environmental friendly dyeing auxiliary was successfully prepared with acryloyl oxyethyl trimethyl ammonium chloride (DAC), acrylamide(AM) and butyl acrylate as raw materials. The effects of the reaction conditions on the percent grafting (PG%), grafting efficiency (GE%) and cationic degree were investigated. And the structures and properties of the polymer were characterized by FTIR, DSC and TGA. The application test showed that this Auxiliary could significantly improve the dyes absorption of leather and endow the leather with excellent dry and wet rub resistance.

**Key words:** dyeing auxiliary; cationic degree; environmental friendly