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鲍鱼多糖**Hal-A**的热分析研究

佘志刚,胡谷平,郭志勇,林永成,林木良

中山大学化学与化学工程学院;中山大学测试中心

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摘要　采用热重、热重-红外谱联用及差示扫描量热法，对鲍鱼多糖进行热分析研究 ，结果表明鲍鱼多糖在空气和氮气氛中，230 ～ 340 ℃之间发生剧烈的分解反应 。氮气氛中，是吸热的分解过程；而空气氛中，是放热氧化反应，并且在453 ℃左 右，有另一个急剧的氧化裂解过程。与淀粉、肝素、甲壳素和半乳糖的热分析比较 ，含有硫酸酯的鲍鱼多糖和肝素热稳定性较低，含氨基的甲壳素最高，这反映出不同基团对多糖热稳定性的影响。

关键词　鲍鱼　多糖　热重量分析　示差扫描量热法　热稳定性

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Study on the Thermal Decomposition of the Sulphated Polysaccharide Hal-A from Haliotis diverisicolor Reeve

She Zhigang,Hu Guping,Guo Zhiyong,Lin Yongcheng,Lin Muliang

School of Chemistry and Chemical Engineering, Zhongshan University;Test Centre, Zhongshan University

Abstract　The thermal decomposition of the sulphated polysacchaiide Hal-A from Haliotis diverisicolor Reeve has been studied by using thermogravimetry (TG), thennogravimetry-infrai-ed (TG-IR), differential thermogravimetry (DTG) and differential scanning calorimetry (DSC) in air and N_2. The results indicate that Hal-A is rapidly degraded at 276 ℃ (air) and 281 ℃ (N_2), respectively. It is exothermic in the air atmosphere and endothermic in the N_2 atmosphere. Comparing with chitin and starch, the thermal stability of the sulphated polysaccharide Hal-A and heparin is lower. The results of TG- IR analysis demonstrate that Hal-A is decomposed into CO_2, H_2O, alcohols, oxo-compounds etc and remains mainly contain Na_2SO_4 and carbon.

Key words　sulphated　POLYSACCHARIDE　TG　DSC　THERMAL STABILITY

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通讯作者