



图1 催化剂用量对产品得率的影响

Fig. 1 Effect of catalyst dosage on yield of HNIW

4 结论

对于 TAIW 来说,80%~90% 硝酸/催化剂介质体系是一种比发烟硝酸更好的硝解剂。TAIW 在发烟硝酸中也可得到 HNIW,但需要在 90 °C 温度条件下反应

近 20 h。本研究所用的水解硝化剂中,仅需要在 90~95 °C 反应 6 h 即可制得 HNIW。TAIW 的水解硝化制备 HNIW,产物得率高、纯度高、周期缩短、过程安全可靠、操作方便,是一种有应用价值的 HNIW 制备方法。

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Hydrolysis and Nitration Reaction of Tetraacetylhexaazaisowurtzitane

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Abstract: The hydrolysis and nitration reaction of tetraacetylhexaazaisowurtzitane (TAIW) were studied under several nitration conditions. By using the catalyst, nitration of TAIW in the system of dilute nitric acid can give hexanitrohexaazaisowurtzitane (HNIW) with yield of over 95% and purity over 99%. Moreover, a new method was found out to synthesize HNIW.

Key words: applied chemistry; tetraacetylhexaazaisowurtzitane (TAIW); hexanitrohexaazaisowurtzitane (HNIW); hydrolysis and nitration

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更正(二)

本刊 2005 年第 13 卷第 6 期 422 页《2,2',4,4',6,6'-六硝基均二苯基苯乙烯的合成、结构和性能》一文题称化合物的名称经作者刘艳红等慎重考虑后认为改为“1,4-二(2,4,6-三硝基苯乙烯基)苯”较妥,英文名为 1,4-di(2,4,6-trinitrostyryl)benzene。

本刊 2005 年第 13 卷第 6 期英文图文摘要中(IV)pyridine 应为 piperidine。

特此说明。

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