# 一般基質與持久基質共同培養對活性污泥分解持久基質之影響

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**摘 要**

生物特異性化學物質被認為是持久性和毒性的有機化合物。因此，當持久機有機出現在廢水中將是難處理者。對於污染物處理中常用的所有方法，污染物分解速率是評估處理方法的有效性和適用性的重要因素之一。本研究的目的是探討不同濃度的輔助基質對持久性物質分解速率的影響，並測量是最有利於分解速率的最佳輔助基質濃度。 在本研究使用2,4 -二氯苯酚乙酸（2,4-D）作為持久性的代表物質，而蛋白?和糖作為輔助基質的代表。活性污泥的馴化，是基於污泥完全分解100 mg/l的2,4-D連續三次。糖和蛋白?添加方式分為單獨或合併二式，2,4-D的分解反應則是200mg/l的2,4-D和140 mg-SS/l的活性污泥。添加糖的濃度分別是20，40，60，80，100和150 mg/l，而添加蛋白?的濃度分別為20，40，100，150，200，和300mg/l。 所獲得的結果顯示，糖和蛋白?在不同濃度之下對2,4-D的分解速率有不同程度的影響。單獨添加時，2,4-D在25小時內完成分解，40mg/l的糖和150 mg/l蛋白?被認為是最佳濃度。在合併添加時， 2,4-D在20小時內完全消耗；合併的最佳的糖和蛋白?濃度分別為40和150mg/l。

關鍵詞 : 活性污泥

**目錄**



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