

## 含硫酸盐模拟高放废液罐式法玻璃固化中间装置中硫的分布

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**摘要** 含硫酸盐高放废液在玻璃固化过程中往往出现黄相。为消除黄相,在工程上不得不大大降低废物氧化物的包容量。文章提出了一种在罐式玻璃固化的加料中添加还原剂,使硫酸盐分解,并使分解产物进入中放废物流出物,从而解决黄相问题的办法。文中给出了在不同操作方式下,硫酸根在工艺系统中的分布,并讨论了固化冷凝液全返回到料液,长期运行后,硫酸根在系统中累积对操作的影响。

**关键词** [高放废液](#) [玻璃固化](#) [硫酸盐](#) [黄相](#)

分类号

## SULFATE DISTRIBUTION IN THE POT TYPE FACILITY FOR VITRIFICATION OF SIMULATED SULFATE CONTAINING HLW

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**Abstract** In order to suppress the "yellow phase" often found in the vitrification melter for processing sulfate-containing HLW, waste loading of glass had to be lowered sharply, resulting in poor economy. A method is presented here that can decompose the sulfate in HLW by adding a reducing agent into the melter, and the decomposed gases are then trapped by soda solution in the washing tower to be treated as intermediate level liquid waste. Sulfate distribution in the process under different operation conditions is given, and the effect of sulfate content build-up in the process system caused by feeding back condensate on process operation is discussed.

**Key words** [High Level Waste\(HLW\)](#) [Vitrification](#) [Sulfate](#) ["Yellow phase"](#)

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