

高放废液中锝的分析

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摘要 将萃取光度法用于高放废液(HLLW)中锝的分析。该方法用2,4,6-三甲基吡啶从碱性介质中萃取得,反萃后,再从H₂SO₄介质中用季铵7402-氯代正丁烷萃取。将其有机相与KSCN的H₂SO₄溶液接触,使之生成紫红色的络合物。该络合物在512nm处有最大吸收,其摩尔吸光系数力5×10⁴,并能稳定几个小时。

关键词 [锝](#) [萃取光度法](#) [高放废液](#)

分类号

DETERMINATION OF CONTENT FOR TECHNETIUM IN HIGH-LEVEL LIQUID WASTE (HLLW)

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Abstract The extraction-spectrophotometrical analysis of technetium in HLLW is described. First, Tc is extracted from the Na₂CO₃ medium into the 2,4, 6-trimethylpyridine and stripped into H₂SO₄ solution from the organic phase by the addition of CCl₄, then Tc is extracted into tetraalkylammonium (7402)/n-butyl chloride. The n-butyl chloride phase contacts with H₂SO₄ solution containing KSCN, and the purplish red complex with peak of absorption at 512nm is stable for several hours. The method was used for the determination of content of technetium in HLLW, and the result showed that many metal ions in it don't cause interfere with analysis of Tc.

Key words [Technetium](#), [Extraction-spectrophotometry](#), [HLLW](#).

DOI

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