

# Technical note membrane transport of copper with lix-860 from acid leach waste solutions

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A membrane transport process is described. The process was developed for use in the recovery of copper from nitric acid leach residual solutions. The flux and the extraction extent of copper with 5-dodecylsalicylaldoxime dissolved in Kermac 500-T (an industrial diluent) were measured at 30°C by using a membrane extractor made of a hollow fibre. The content of carrier extractant in the wall of the porous fibre presented the biggest influence on metal extraction rate and its extractability. The results were explained by a diffusion model which considers that the extraction chemical reaction would occur at the inner interface of the liquid membrane, taking account that diffusion of copper-oxime complex through the membrane would be the rate-controlling step. © 1997 Published by Elsevier Science Ltd.