

Title (en)
METHOD FOR TREATMENT AND SOLIDIFICATION OF LIQUID WASTE

Title (de)
VERFAHREN ZUR BEHANDLUNG UND VERFESTIGUNG VON FLÜSSIGEN ABFÄLLEN

Title (fr)
MÉTHODE DE TRAITEMENT ET DE SOLIDIFICATION DE DÉCHETS LIQUIDES

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Application
EP 19848927 A 20191216

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Abstract (en)
[origin: WO2020128158A1] A method for solidifying radioactive waste, and a solidification product. According to the method, radioactive waste, which comprises intermediate-level ion-exchange resin used, is mixed into a mixture of hydraulic binder and water, and the generated mixture is hardened to form a solidification product that comprises waste. According to the present invention, the hydraulic binder comprises a mixture of cement and blast furnace slag, and an activator for blast furnace slag, and at least part of the water used for the solidification is comprised of boron-containing evaporator concentrate solution. The present invention also relates to a method for binding the radioactive components of the aqueous evaporator concentrate. By using the present solution, it is possible to increase the amount of waste in the package and, at the same time, it is possible to reduce the amount of the separately added alkaline components in the solidification mass recipe. The fact that the surface dose rate does not increase significantly, or not at all, brings with it a very considerable advantage.

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