

Title (en)
PROCESS FOR THE PRODUCTION OF LITHIUM HYDROXIDE

Title (de)
VERFAHREN ZUR HERSTELLUNG VON LITHIUMHYDROXID

Title (fr)
PROCÉDÉ POUR LA PRODUCTION D'HYDROXYDE DE LITHIUM

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Application
EP 21887939 A 20211029

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Abstract (en)
[origin: WO2022094696A1] The present invention relates to a process for the production of lithium hydroxide by crystallization of lithium hydroxide monohydrate from a solution of lithium nitrate, comprising the following steps: (a) providing a lithium nitrate-containing solution with a concentration of lithium nitrate of 13.0 – 15.4 mol/kgw, preferably 13.5 – 15.4 mol/kgw, more preferably 14.0 – 15.0 mol/kgw (kgw = kg H₂O), (b) adding an approximately stoichiometric amount of sodium hydroxide to the lithium nitrate-containing solution at a temperature within the range of 70 – 85 °C, preferably 75 – 85 °C, in order to crystallize lithium hydroxide monohydrate, and (c) separating the formed lithium hydroxide monohydrate at a temperature within the range of 70 – 85 °C, preferably 75 – 85 °C, preferably by centrifugation and optionally washing of the separated lithium hydroxide monohydrate with water. The process is efficient and lead to high yield of lithium hydroxide monohydrate.

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