

Title (en)
IONIC LIQUID FOR PICKLING STAINLESS STEEL AND METHOD FOR PICKLING STAINLESS STEEL BY USING SAME

Title (de)
IONISCHE FLÜSSIGKEIT ZUM BEIZEN VON ROSTFREIEM STAHL UND VERFAHREN ZUM BEIZEN VON ROSTFREIEM STAHL UNTER VERWENDUNG DERSELBEN

Title (fr)
LIQUIDE IONIQUE POUR DÉCAPAGE D'ACIER INOXYDABLE ET PROCÉDÉ DE DÉCAPAGE D'ACIER INOXYDABLE EN UTILISANT CELUI-CI

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Application
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Abstract (en)
Disclosed are an ionic liquid for pickling a stainless steel capable of rapidly removing oxide scale from the stainless steel at room temperature without using nitric acid or hydrofluoric acid and a method for pickling a stainless steel by using the same. The method for pickling a stainless steel according to an embodiment includes performing electrolytic pickling treatment by immersing a stainless steel in a pickling solution including an ionic liquid, wherein the ionic liquid comprises at least one of an imidazolium cation, a betainium cation, a sulfonium cation, a piperidinium cation, a phosphonium cation, an ammonium cation, a pyridium cation, a pyrrolidinium cation, and a morpholinium cation, as a cationic functional group, and at least one of a halide anion, a sulfonate anion, an alkylsulfate anion, a phosphinate anion, a salicylate anion, a nitrate anion, a tetrafluoroborate anion, a hexafluorophosphate anion, and a bistriflimide anion, as an anionic functional group.

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