HYDROGEN PRODUCTION IN REACTION OF ALUMINUM WITH WATER AT ACTIVATION BY COPPER

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Abstract: Hydrogen production in the reaction of aluminum within the aqueous alkaline solution at activation by copper was studied. Three variants of copper introduction were considered: (*i*) preliminary, a chemical coating of the aluminum surface; (*ii*) copper introduction in the aluminum melt or pressing a mix of the aluminum and copper powders; and (*iii*) continuous supply of copper to the aluminum surface during a reaction. The reaction rate was increased up to 6 times.

Keywords: hydrogen generation; aluminum; hydrogen reactor

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