## **ABSTRACT**

Production of hydrogen and oxygen by electrolysis of water. Using hydrogen in the production of foodstuffs. Calculation of the cell type Bamag C100 load current of 4.5 kA.

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Coursework developed to produce hydrogen and oxygen by electrolysis of water. We consider the physical and chemical properties of water, its use in food and how to obtain. The selection and description electrolyzer design type Bamag C100. The calculation of electrolysis of water in the electrolyzer type Bamag C100 load current of 4.5 kA. Calculated balances of current, voltage and power, heat and material balances and expenditure ratios.

ELECTROLYSIS OF WATER, ELECTROLYZER BAMAG C100, CURRENT BALANCE, VOLTAGE BALANCE, MATERIAL BALANCES, HEAT BALANCES, SUPPLIES RATES, CONSUMED INDEX.