ISSN: 2278-1862



## Journal of Applicable Chemistry

2021, 10 (2): 179-188 (International Peer Reviewed Journal)



## Determination of Active Constituents of Some Household Cleaners Available in Benghazi Markets

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Accepted on 3<sup>rd</sup> March, 2021

## **ABSTRACT**

In the present study a total of 28 samples of different domestic cleaning products were randomly purchased from Benghazi markets-Libya to detect the active components concentrations and the pH values. The obtained data were compared with the respected product's label and Libyan Standards Limits. The pH values of the cleaning products were measured using pH-meter connected with glass combined electrode. The products were analyzed using iodometric method, to determine the concentration of sodium hypochlorite in bleach samples. Potentiomtric titration was used to determine total acidity% of anti-scale cleaners and alkalinity% of drain open and kitchen cleaners. The results of analysis showed that there were 5 bleaching samples had sodium hypochlorite concentration above the limit set by Libyan Standard Legislation (5%) and all the anti-scale cleaners had concentration of hydrochloric acid below the limit set by Libyan Standard. The total alkalinity% of the open drain cleaners were in agreement with the concentrations available on products package label.

## **Graphical Abstract**

Iodometric Titration
Household Cleaning Products

Potentiometric Titration

Titrimetric Methods for Analysis of some Household Cleaners.

**Keywords:** Gel technique, Iodate, Star shape, Chemical Composition.