DETERMINATION KINETICS OF THE COMPOUNDS CHLOROPHYLLOUS IN THE SOY LECITHIN.


Soy lecithin is the name given to a mixture of phospholipids of the rude oil and the pigments such as chlorophyll. It is extracted by the process called degumming, that is a removal using water. Lecithin is commercially important as food emulsifier, but its color dark amber can sometimes be a restriction on its use. Therefore, the bleaching of lecithin occurs by clearing process is that the treatment aimed at removing the color of the product. Commonly, is used the hydrogen peroxide for the depigmentation of soy lecithin. A component of lecithin which is oxidized by hydrogen peroxide is chlorophyll. Therefore, the objective of this study was to determine the degradation kinetics of chlorophyllous compounds in soy lecithin after clarification with hydrogen peroxide \((\text{H}_2\text{O}_2)\) brand IMPEX 35% \((\text{v} / \text{v})\). The study involved the measurement of chlorophyll through the methodology of the Engel and Poggiani studied (1991), espectrophotometric determination of chlorophyll, in the equipment of the mark 55 HACH LANGE, Model DR 2800. It was found that the levels of total chlorophyll, a and b in the times of 10, 30, 60 and 90 seconds after clarification, adding 0.5 mL of \text{H}_2\text{O}_2\ 35\% \text{ (v / v)}, increased with the exposure time and stirring of lecithin in the electric stirrer model 1006 Biomatic in the maximum speed. It was concluded that the oxidation has led to the reduction of chlorophyll color lecithin, passing from amber dark color to yellow color, by oxidation of compounds chlorophyllous.