SELECTIVITY OF SPECTROPHOTOMETRY METHOD FOR FORMALIN ANALYSIS USING SHRYVER AND SCHIFF REAGENT

by Regina Tutik Padmaningrum, Siti Marwati

ABSTRACT

Research was conducted to determine the selectivity Schryver and Schiff reagent in the analysis of formalin by spectrophotometry. The matrix in the tofu formalin sample studied were glucose and galactose.

The subject of this research is analysis of formalin by visible spectrophotometry using Schryver and Schiff reagent. The object of this researhc is selectivity of Schryver and Schiff reagent in the presence of glucose and galactose matrix in the tofu sample. The tofu sample is containing glucose, lactose and formalin. The selectivity of the method expressed as a percentage error of measurement results of absorbance of the solution.

The results showed that reagents Schryver was the less selective while Schiff reagent was selective for analysis of formaldehyde in the tofu sample in the presence of glucose and galactose matrix. In the analysis, matrix addition of glucose, galactose, and a mixture of both, each decrease absorbance in a row amounted to 18.88, 18.03, and 31.53%. For the formalin test in the sample with a reagent Schryver, the addition of a mixture of glucose and galactose matrix shows the error value of 33.63%. In the analysis with Schiff reagent, the addition of matrix glucose, galactose, and a mixture of both, each decrease absorbance measurement results with error value of 13.88; 23.95 and 7.19%. For the formalin test in the tofu sample with Schiff reagent, the addition of a mixture of glucose and galactose matrix lowers the absorbance values ??of 7.92% error.

Kata Kunci: *selectivity, Schryver reagent, Schiff reagent, formalin analysis*