ABSTRACT

Acetone which has been re-mixed inks can be purified by distillation. Waste samples in this study were taken from the printing unit PT. Garuda Food Putra Putri Indonesia with the content of 62.08% acetone, 9.4% ink, and 28.52% water. Recovery of acetone in the industry is expected to reduce the amount of B3 issued by the manufacturer and also reduce the cost of imports of acetone.

Recovery of waste acetone in this observation using a batch method distillation with variable temperature 60, 63, 65, and 68 °C during the process of distillation. The analysis in this observation is levels of acetone using gas chromatography methods, boiling point, flash point and specific gravity.

From that analysis, it was found that the optimum temperature to produce maximum levels of acetone by distillation temperature is at 65 °C of 71.645%. Flash point is not affected by temperature distillation because test results showed the same figure is 40 °C. The specific gravity of the approaching new quality acetone is distilled at a temperature of 65 °C is 0.808. Purification of waste from the printing unit PT. Garuda Food Putra Putri can be implemented because it provides economic value to the company and can reduce waste B3.

Keywords: Distillation, acetone, ink