

ABSTRACT

A STUDY ON LATEX DRYING CHARACTERISTICS WITH DIVERSIFICATION THICKNESS BY USING GREENHOUSE EFFECT DRYER

By

Zulfikar Akbar

Fresh latex has a high level of moisture content. To be useful for production, latex should be dried to reduce its water content. Latex drying by rubber farmers is commonly to do conducted in opened areas for 14 days with a very thick size of latex. Therefore, we should be solutions to make latex drying faster. This research, latex drying was treatment by using greenhouse effect dryer with three thickness level. The aims of this research was to find out characteristics of latex drying with three different thickness levels by using greenhouse effect dryer with dimension is 150 x 70 x 120 cm. Latex was coagulated on containers, with dimension of containers is 40 x 10 x 15 cm. Latex was formed with an equipment which intervals of 2, 1.5, and 1 cm and then slab was dried. Result of this research, latex was dried with greenhouse for 9 hour/day for 6 days along. Temperatures of greenhouse effect dryer ranged from 30 to 50⁰C with relative humidity of approximately 47%. The treatment with thickness of 2, 1,5 and 1 cm has final moisture content respectively is 9.53%, 8.96%, and 5.87%bb, and drying acceleration during drying process were 0.3773%, 0.4119%, and 0.4445% w/w / day.

Keywords : Greenhouse Dryer, Latex, Thickness