PENGARUH WAKTU FUMIGASI PADA PEREKAT KAYU LAPIS

THE EFFECT OF TIME FUMIGATION ADHESIVE PLYWOOD

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ABSTRACT

Plywood panels are made with a single sheet of veneer glue or more on both sides of an intact core or wood veneer. Formaldehyde emissions from wood panel products such as plywood and particle board are glued with urea formaldehyde (UF) can be detrimental to health, especially if used in a room with limited ventilation. To reduce emissions of formaldehyde, the product can be fumigated with a chemical. Decrease in the concentration of Urea Formaldehyde emissions from plywood can be done by fumigation Ammonium Hydroxide. The longer the time fumigation is given, the greater the decline in value of the concentration of Urea Formaldehyde emissions. Value of Urea Formaldehyde Emissions on plywood that meets the standards of fumigation treatment is given 1 hour and 1.5 hours at different temperatures and pH. While fumigation at 0.5 hours Urea Formadehida gas emission values do not meet standards, this is due to the fumigation period is not too long. The less time the fumigation, the greater the value Formaldehidanya Urea gas emissions, due to free formaldehyde absorbed by the Ammonium Hydroxide is still small. Thus forming Heksametilentetraamine bit too, free formaldehyde concentration emitted plywood still high. the higher the temperature, the smaller the value of emissions. This is due to the high formaldehyde volatile as a result, so as to reduce the content of free formaldehyde in Urea Formaldehyde Glue. And the greater the pH of the process tends to the smaller emissions. This is due, at near neutral pH, free Formaldehyde more perfect reaction speed with Urea.

Key words: Fumigation,, Formaldehyde, Plywood