

## ABSTRACT

Fire is a disaster caused by undesired fire that causing great amount of loss. Fire risk management is one the best prevention. The purpose of this study was to create fire risk management in Gum Rosin and Turpentine Factory in Rejowinangun.

This study was a descriptive-observational study using a cross-sectional study design. Object of the study was potency of fire risk and fire risk control existed in each units in Gum Rosin and Turpentine Factory in Rejowinangun. Data analysis was done using semi-quantitative fire risk assessment.

Fire hazards in Gum Rosin and Turpentine Factory in Rejowinangun consisted of boiler, cooking kettle, electrical installation, lightning, welding, grinding, electric stove, oven, hot gum rosin, turpentine and papers. The value of fire risk obtained in five work units in Gum Rosin and Turpentine Factory in Rejowinangun were 4 medium risk in production and storage work unit, 9 low risk in laboratory, maintenance and administration work units. Fire risk control had implementation values ranged between 90% - 50%. There were six fire residual risk existed that consisted of cooking kettle, lightning, welding, grinding, electrical installation in maintenance units, and electrical installations in laboratory.

In general, the level of fire risk in Gum Rosin and Turpentine Factory (PGT) Rejowinangun was low. It is advised to increase number of tools of fire risk control for production and storage work unit, that consisted of developing standard operating procedure for boiler, creating written occupational health and safety policies, creating fire control team and implementing hot work permit. Laboratory, maintenance and administration work units need to review and maintain fire risk control that has been performed.

**Keywords:** fire hazard, fire risk, fire risk assessment, fire risk control