ABSTRACT

Rosin and Turpentine Rejowinangun of Factory produces chemicals gum rosin (gondorukem) and turpentine. In this factory there are other chemicals in the process, there are also temperature and pressure high enough so that the required risk assessment as an initial step in the implementation of occupational safety and health systems. The risk assessment undertaken to control the potential hazard in the workplace.

This method is used to determine the level of implementation of Inherent Safety, by calculating the index of damage (damage index) of fire safety, toxicity and indices of damage to the environment. In addition, this method also calculates the index of process equipment to minimize potential safety hazards and also take into account the principles Inherent Safety. The end result of this research is the application of Inherent Safety Index. Based on these indices, the efforts to minimize the risks posed can be done with additional equipment to ensure the safety of the process.

From this assessment obtained by the level of safety inherent in Section Factory Process Rosin and turpentine are included in the category of Inherent Safety Zone with index value 3.195. Based on this value in the process means there should be a better safety system again.

Keywords: Integrated Inherent Safety Index, Hazard Index, Inherent Safety Potential Index