ABSTRACK

Formaldehyde is a chemical commonly used in daily life. But the frequent abuse of formaldehyde among the public, which is used as a food preservative. Abuse of formalin as a fod preservative is bad for body. The impact of formalin on body can be acute and chronic. Acute when the effect directly visible such as redness, allergy, irritation, watery eyes and nausea. Chronic when the effects is affected looks after a long time, such as disorders of the digestive tract, liver, pancreas, kidneys, central nervous system, menstruation, and suspected carcinogens. Therefore created a device that can detect the levels of formaldehyde in foods.

Gauges formalin on the food it serves to measure the percentage of formaldehyde in foods. This device utilizes gas sensors controlled by a microcontroller. The type of gas sensors used is sensitive to Formaldehyde, gas sensor is WSP2110. The result of the detection of the sensor will be displayed into a Liquid Crystal Display (LCD) that installed.

Formalin detection tool can be used according to its function. Suitable with testing result on food contain 10 until 40 ppm formalin have accurate value of 95,25 %. While the temperature sensors used have a accurate value of 99.26 %.

Keywords: gas sensors, WSP2110, formaldehyde, gauges