ABSTRACT

The purpose of this research was to determine the shelf life of tomatoes dodol at different storage temperatures using Accelerated Shelf Life Testing (ASLT) method, Arrhenius models. The benefit of this research is to determine the approximate shelf life of tomatoes dodol products stored at different storage temperature.

This research was devided into two steps, preliminary and primary reseach. The preliminary research conducted to determine the formulation to be used in the primary research comparing the moisture content and sucrose content of three formulations tomatoes dodol made with dodol quality requirements according to SNI 01-2986 2003. The method used in primary research were accelerated shelf life testing (ASLT) using Arrhenius equation with the parameter of free fatty acid, total mold, and organoleptic test.

The result of the research based on free fatty acid content showed that tomatoes dodol predicted on store temperature 20°C have shelf life of product was 11,0909 days, on store temperature 25°C have shelf life of product was 18,0192 days, and store temperature 30°C have shelf life of product was 21,856 days. Based on total mold according to SNI 01-2986, tomatoes dodol that storage for 15 days in temperature 20°C still suitable for consumption, while tomatoes dodol that storage in temperature 25°C and 30°C was not suitable for consumption.

Key words: tomatoes dodol, Arrhenius, shelf life.