

<b>Project</b>	The Study of Hydrogel Properties from Tapioca Starch and Aloe Vera
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### **Abstract**

This research aimed to study the properties of hydrogel from tapioca starch and aloe vera. Experiment by studying the appropriate amount of tapioca starch and aloe vera gel in the preparation of hydrogel film. Hydrogel films in various conditions were used to study the ability to absorb water. The results showed that the optimum conditions for hydrogel production was using tapioca starch 7% by weight mixed with aloe vera gel 30 ml, 0.2 g ammonium purified sulfate, 1.0 g glycerol and N, N'-methyl-bis-acrylamide 0.2 grams at 70 degrees Celsius for 8 hours. This hydrogel film were able to absorb water at 51.42 percent.

**Keywords** Hydroegl, Aloe vera, Tapioca Starch