The usage of cassava starch edible coatings has been shown as an alternative to prolong the strawberry conservation period, that in low temperatures (0 - 4 °C) lasts 5 days. In this study it was evaluated the effect of the application of cassava starch coatings combined or not with glycerol on the physical-chemical properties of strawberries stored under refrigeration. Were applied to the strawberries coatings containing 3.0 % (w/v) of cassava starch, with or without 1.0 % (v/v) of glycerol, and as control were considered the fruits without coating. During the period of 15 days strawberries were evaluated regarding moisture, acidity, pH, total soluble solids, weight loss and color. The strawberries treated with coatings showed lower moisture loss, decrease total acidity and pH increase (p<0.05) until the 11th day of storage, compared to control. By the end of the 15 days of storage the fruits treated with starch and starch with glycerol did not change the color, but the treatment did not avoid the weight loss. The content of soluble solids of the samples treated with the coatings was statistically inferior (p<0.05) to control until the 5th day of storage. The application of the coatings didn’t reduce the water loss, but it were considered effective in reducing the rates of reactions of fruit ripening.