Abstract

The use of synthetic chemicals in the manufacture of effervescent causing concern the government will affect the health, so it is necessary to substituted the synthetic chemical with natural ingredients such as ginger, lemongrass, and natural sweeteners.

The first procedures of effervescent ginger and lemongrass extract is to weigh as much as 167 g of lemon grass, to peel, to cut lemon grass, to heat the lemon grass with the addition of 2 l of water to boil, and then filter it. The second stage is to make ginger extract by measuring ginger to 1000 g, peel and wash it, crushing the ginger by adding lemongrass extract, and then heating the ginger and lemongrass extracts at a temperature of 100°C. The third stage is added the mixture of ginger and lemongrass extract with a natural sweetener such as sugar, glucose, and brown sugar each of 1765,1 g, and then stirred into caramel. Variable used is the type of natural sweetener ingredient is sugar, glucose, and brown sugar. A kind of natural sweeteners used has ratio of 1 : 1 (natural sweeteners : powder mixture). At the fourth stage, the caramel is naturally cooled to make powder and homogenized at 50°C into smaller particle size of 100 mesh. At the fifth stage, the product of effervescent is made by mixing the powder with citric acid and sodium bicarbonate respectively as 0,28% and 0,53%. The sixth stage of effervescent powder is packing it with airtight aluminum foil.

From the experiments are obtained that the density of an effervescent solution from ginger and lemon grass with the addition of sugar and glucose are 1,01 g/ml and 0,99 g/ml respectively and it’s density is higher than the commercial effervescent solution which have density at 0.63 g/ml. Test results on the dissolution rate of effervescent from ginger and lemon grass with the addition of variable natural sweetener such as sugar and glucose are respectively at 1,59 minutes and 1,37 minutes and those are matched with a reference with the optimum time of 1 to 2 minutes.

Keywords: effervescent, ginger, lemon grass