How Fast Is Fast?

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My experiment consisted of testing the effectiveness of antacids in two different ways, and I also tested how long it remained effective. I started by testing the effectiveness by crushing or pouring the antacid into the acidic product and stirring each one for 10 minutes. Then after 10 minutes I tested the pH with a meter and strips. The other way I tested it was by using the titration method. I put 100 drops of the antacid-acid mixture into an Erlenmeyer flask and then added 14 drops of Phenolphthalein and if it did not turn pink I added two drops of Sodium Hydroxide till it turned pink and remained pink after stirring it. Then take however many a drop of sodium hydroxide you used and then subtract that from 100 and then that is the effectiveness of the antacid in percent. For example Rolaids was 98% because it took two drops of sodium hydroxide. My experiment had three different tests titration, time test, and the dissolution rate. The titration test concluded that Alka-Seltzer, Rolaids, and TUMS Extra where the most effective being 98 percent effective, only needing 2 drops of sodium hydroxide. The effectiveness test included crushing up the recommended dose of the antacid, and adding it to 100 mL of acid. I stirred it for 10 minutes and then tested the pH. The T-Test indicated dissolution rate was 0.117351608 and the titration was 0.129471521. The standard deviation right and after is 26 and 22 respectively, indicating that all percentages are in close range to the average.

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