

Irreversible hydrocolloids — alginate

Irreversible hydrocolloids (*alginate*) is most accurate when at least 3 mm of space exists between the impression tray and the tissue. The other impression types are most accurate when a small but definite space exists between the impression tray and the tissue.

Remember: The setting time of alginate is controlled by the **amount** of sodium phosphate that is present. **Sodium phosphate** serves a **retarder** in this reaction, which means it slows down the process. **If suitable amounts of calcium sulfate, potassium alginate, and sodium phosphate are mixed together in proper proportions in water, after they become partially or totally dissolved the following reaction will take place:**



When the supply of sodium phosphate is exhausted, the calcium ions begin to react with the potassium alginate to produce calcium alginate as follows:



1. **Fast** removal of impression from the mouth **increases** both the compressive and tear strength of the impression.
2. All impressions must be rinsed and disinfected **prior** to pouring or sending to the laboratory. **Soak** or **spray** for a minimum of **10 minutes**. **Important:** Always follow the manufacturer's recommendation for the specific product!!!