

Need for special equipment

The use of agar impression material **does require** special equipment. The reproduction is excellent, and the impression is easy to pour compared to elastomeric impression material.

Reversible hydrocolloid is an impression material that changes its physical state from a sol to a gel and then back to a sol.

Composition of reversible hydrocolloids:

- 85% water
- 12-15% agar (*agar is an organic substance derived from seaweed*)
- *** Traces of borax (*for strength*), potassium sulfate (*improves gypsum surface*) and sodium tetraborate.

Conditioning bath for reversible hydrocolloid:

• **Three compartments:**

- The **first bath** is for liquefying the semisolid material. A special water bath called a “hydrocolloid conditioner” at **212° F** ($100^{\circ} C$) liquefies the material. After liquefying, the preset thermostat cools the temperature to **150° F** ($65.5^{\circ} C$) automatically.
- The **second bath** becomes a storage bath that cools the material, readying it for the impression. At this temperature, the tubes are waiting for use.
- A **third bath** is kept at **110° F** ($43.3^{\circ} C$) for tempering the material after it has been placed in the tray.