

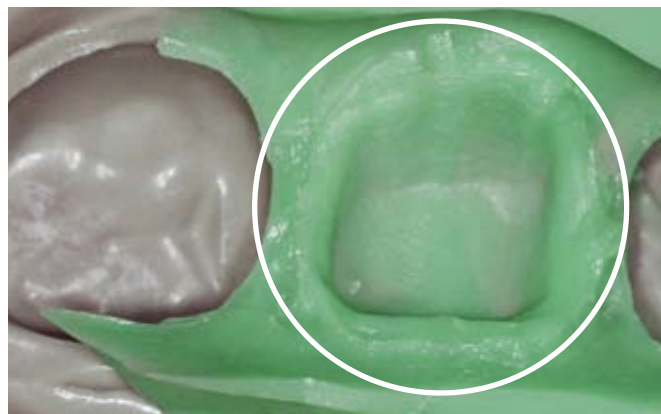
Lack of Impression Detail

Visual Appearance: Muted detail reproduction.

Result: Crowns may be too tight, or loose, and not fit correctly.

CAUSE	SOLUTION
Impression material stored at elevated temperature.	Store impression material at room temperature.
Impression material stored at too low a temperature (prolongs the setting reactions, changes viscosity and requires exceptionally high extrusion forces for automix materials).	Keep impression material at a temperature of 18°C/64°F at least one day prior use.
Thick blood/saliva pooled around prep.	Remove blood and saliva prior to making impression. Use 2-step impression technique.
Inadequate retraction of sulcus around prep.	Use good retraction technique, with proper moisture control.
Exceeding the working time.	Follow manufacturer's working time specifications. Choose material with longer working time.
Inadequate disinfection effects surface quality (detail reproduction) and dimensional stability.	Use water based disinfectants according to FDA guidelines. Follow manufacturer's instructions for use.

Continued



Lack of Impression Detail

CAUSE

For Polyether Materials

Substances with $\text{pH} < 4$ inhibit setting reaction, most commonly by contact with acidic retraction materials and hemostatic agents containing epinephrine or ferric sulfates.

SOLUTION

Use retraction materials having $\text{pH} \geq 4$.

Select retraction materials and hemostatic agents not containing these chemicals.

Rinse, remove, and dilute hemostatic solution from the preparation with water spray and suction. Dry before taking the impression.

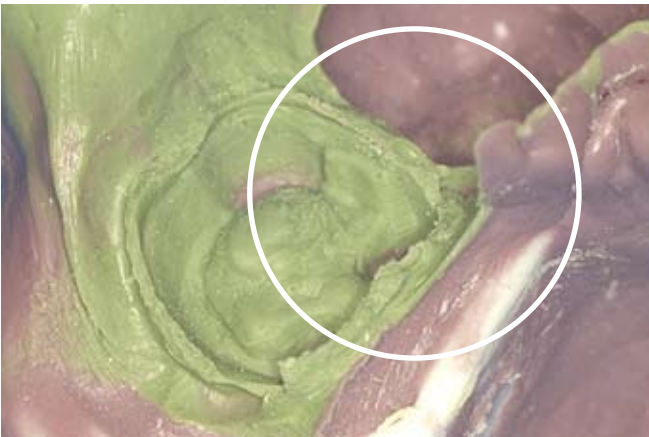
Incorrect storage conditions of the final impression affects surface quality (detail reproduction) and dimensional stability.

Rinse polyether impressions with water and blow dry before sending it to the lab.

Do not send the impression in the same bag as an alginate impression to the lab.

Avoid storing impressions in sealed bags.

Store the impression at room temperature away from direct sunlight.



Poor Retraction and Syringing Technique



Exceeding the Working Time