

# Silicone Impressions

## Dear orthodontist,

The bonding model plays a key role in the laboratory process. Its quality has a crucial impact on the course of treatment with respect to positioning errors and brackets losses. Following extensive clinical testing with different materials and impression techniques, we are pleased to present the procedure we found to be best from the aspects of precision and clinical handling.

It is a two-phase silicone impression. A new correctable impression process using a space maintainer foil makes this impression very easy to take. It is therefore ideal for application in an orthodontic office otherwise taking alginate impressions only. Using a disposable tray in addition offers numerous advantages:

1. The impression is in all events non-porous, and a little practice soon results in first-time perfection.
2. Not only the teeth but also the entire gingival margin is reliably precisely impressed (important for the definition of the tooth axis).
3. Model production is superfluous. All you have to do is send us the impressions.
4. The casts need not be packed as carefully as models (no fractured teeth any more).
5. The package is smaller and lighter (2 impressions instead of 4 models).

The following pages offer suggestions for the clinical impression-taking procedure using addition cured silicone, recommendations for other materials, and some instructions to be observed if you wish to continue sending us plaster casts (which is, of course, still possible).

## CLINICAL PROCEDURE FOR IMPRESSION-TAKING WITH SILICONE:

1. Make an intraoral check of those teeth from which impressions are to be taken. The lingual tooth surfaces should be free of calculus and plaque. Take special care in checking the lingual surfaces of the mandibular molars, where plaque is frequently overlooked. Extreme undercuts e.g. sanitary bridges, should be blocked out with wax.

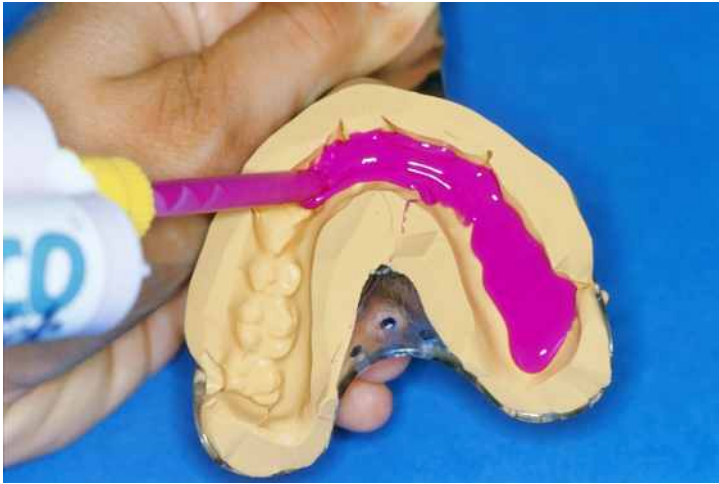
2. Select the correct tray size.
3. Coat the disposable tray with adhesive.
4. Mix the kneadable silicone according to the instructions.
5. Apply the space maintainer foil, then shorten it distally with a pair of scissors to tray size.



6. The tray must be held carefully while the impression is being taken.
7. After hardening, the impression is easy to withdraw from the mouth. Remove the space maintainer foil and shorten the impression at the edges approx. 3mm above the gingival margin to simplify removal after taking the correctable impression.



8. Check the cut impression for floating parts before air-drying it.
9. Fit the mixing gun for the thin-bodied silicone with a new mixing tube and fill the depression in the tray with correction material.



10. Position the impression with increasing pressure in the patient's mouth and keep it at constant pressure. If the patient swallows while the impression is being taken, the tray must not rise to distal, as blistering may otherwise occur at the occlusal surfaces of the molars.
11. When polymerisation is completed (approx. 2 min), remove the impression.
12. Check the impression:
  - a) Are all teeth clearly impressed (including the fourth molars)?
  - b) Has the correction material flowed out thinly and evenly?



### **MATERIAL RECOMMENDED FOR PRODUCTION OF A 2-PHASE SILICONE IMPRESSION:**

- ✓- disposable tray
- ✓- tray adhesive
- ✓- kneadable addition cured silicone: BISICO S1
- ✓- thin bodied, addition cured silicone: BISICO Quick
- ✓- mixing gun and tubes (2<sup>nd</sup> generation mixing gun)
- ✓- space maintainer foil: Plicafol (available from BISICO)

Your contact at Bisico is Mr. Voigt, Tel: +49-521/871648

### **IMPORTANT INSTRUCTIONS FOR MODEL PRODUCTION USING ALGINATE IMPRESSIONS:**

1. Since we manufacture a target setup as the basis for individual positioning, we need two virtually identical models of each arch to be bonded. If one arch is not to be bonded, we need only one model of this arch.
2. To prevent blistering and inaccuracies at the gingival margin, the depression in the tray should be coated with alginate, using a finger, before the tray is applied to the teeth.
3. A Class 3 hard plaster has proved to work satisfactorily. Class 4 super-hard plaster is much more difficult to insulate due to the higher density of the surface texture and should therefore not be used. Before pouring up, moisten the impression, sprinkle it with plaster, then rinse it out (alginic acid).
4. The models should be absolutely nonporous. Never etch anything in the models.
5. If you pour up an impression twice, please indicate which one is the first. It is usually more precise and is therefore used as the bonding model in the positioning process.
6. Always control the models personally before sending them away.
7. Always pack the models carefully so that no teeth can fracture.

Successful integration of lingual therapy into routine dental practice is a demanding challenge. We would be delighted if our suggestions could make a small contribution to your success. Should you have any questions or suggestions, the entire "T.O.P. Service GmbH" team will be pleased to hear from you.

Further information about our courses, offers and prices as well as lingual case presentations and morphing videos is available online under:

[www.lingualtechnik.de](http://www.lingualtechnik.de)

**WE LOOK FORWARD TO FURTHER  
SUCCESSFUL COOPERATION!**