impression materials

SELECT **polysil**

Super Hydrophilic Viny Polysiloxane Impression Material Regular & Fast Set Featuring Controlled Flow®

Instruction for Use

*Sci*Can

The PolySil SH Super Hydrophilic Impression System is based on an addition-curing vinyl silicone formula delivered in automixing dispensing cartridges (light, medium, multipurpose and heavy viscosities) and hand kneaded (putty soft and firm) formulations. PolySil SH provides excellent dimensional accuracy and stability, and is perfectly suited for a variety of impression techniques.

PolySil SH is a super hydrophilic impression material exhibiting excellent surface wettability. This characteristic will result in better reproduction in moist environments, especially the critical subgingival and interproximal areas. PolySil is thixotropic and provides Controlled Flow®. PolySil SH products will stay in posi-tion without running, slumping or dripping during the working process, yet it will flow freely as soon as pressure is applied upon seating the impression tray. This is Controlled Flow® technology.

PolySil SH can be used for any type of crown and bridge, denture, partial denture, reline and bite registration impressions. It is available in the following:

Light Viscosity:	ISO 4823; Type 3, ADA/ ANSI Spec. No. 19, Type 3
Medium Viscosity:	ISO 4823; Type 3, ADA/ ANSI Spec. No. 19, Type 3
Heavy Viscosity:	ISO 4823; Type 2, ADA/ ANSI Spec. No. 19, Type 2
Multipurpose Viscosity:	ISO 4823; Type 2, ADA/ ANSI Spec. No. 19, Type 2
Firm Putty:	ISO 4823; Type 0, ADA/ ANSI Spec. No. 19, Type 0
Soft Putty:	ISO 4823; Type 0, ADA/ ANSI Spec. No. 19, Type 0

Storage and General Use:

1. Store at room temperature. Note expiry dates on package and contents.
2. Product is designed to be used at room temperature (18-24° C or 65-75° F). Cooler or warmer temperatures will affect working and setting characteristics of the material. eg: a 2° C temperature increase will shorten working time approximately 10-15 seconds; a 2° C temperature decrease will lengthen working time approximately 10-15 seconds.
3. PolySil SH Impressions should not be stored in conditions of extreme heat or humidity.
4. Impressions can be copper or silver plated.
5. PolySil SH Dispensing Gun can be sterilized using heat sterilizers, including STATIM Autoclaves, conventional autoclaves, chemical vapour or dry heat sterilizers.
6. PolySil SH working time can be extended if the material is refrigerated. This will also extend the setting time. (See #2 above)
7. PolySil SH Light, Medium, Heavy and Multipurpose viscosities have a shelf life of three years. PolySil SH Putty has a shelf life of three years when stored at room temperature. Refrigeration will not extend the shelf life.
8. PolySil SH is an addition reaction silicone material. It cannot be combined with standard or condensation type silicone materials.
9. Store used cartridges with mixing tips intact to protect material remaining in the cartridges. Re-using the original cap could cause cross-contamination of base and catalyst components and premature setting or hardening of the material at the tip.

10. Always "bleed" the cartridge before each use by extruding a small quantity of material before applying a fresh mixing tip. This will ensure even dispensing of fresh base and catalyst pastes.

11. Latex dental gloves or hand lotions could seriously inhibit the setting of vinyl polysiloxane impression materials. Test to ensure compatibility before using material. Polyethylene gloves are recommended.

Physical Characteristics and Properties of PolySil SH with regular setting time:

	Light Viscosity	Medium Viscosity	Heavy Viscosity	Multipurpose Viscosity	Putty (Firm)	Putty (Soft)
Mixing Time:	Auto.	Auto.	Auto.	Auto.	30 sec.	30 sec.
Working Time:	2 min.	2 min.	2 min.	2 min.	1.5 min.	1.5 min.
Intra Oral Set:	3 min.	3 min.	3 min.	3 min.	3 min.	3 min.
Setting Time:	4 min.	4 min.	4 min.	4 min.	4 min.	4 min. Max.
Compression Set:	0.4%	0.6%	0.8%	1.2%	1.4%	1.4%
Strain in Compression:	4.7%	3.5%	2.8%	3.0%	2.1%	2.6%
Shore A Hardness ca.:	45	55	63	62	72	65
Max. Dim. Change:	<0.1%	<0.1%	<0.1%	<0.1%	<0.1%	<0.1%

Physical Characteristics and Properties of PolySil SH with fast setting time:

	Light Viscosity	Medium Viscosity	Heavy Viscosity	Multipurpose Viscosity	Putty (Firm)	Putty (Soft)
Mixing Time:	Auto.	Auto.	Auto.	Auto.	30 sec.	30 sec.
Working Time:	1.5 min.	1.5 min.	1.5 min.	1.5 min.	1 min.	1 min.
Intra Oral Set:	3 min.	3 min.	3 min.	3 min.	3 min.	3 min.
Setting Time:	2 min.	2 min.	2 min.	2 min.	2 min.	2 min.
Compression Set:	0.4%	0.6%	0.8%	1,2%	1.4%	1.4%
Strain in Compression:	4.7%	3.5%	2.8%	3.0%	2.1%	2.6%
Shore A Hardness ca.:	45	55	63	62	72	65
Max. Dim. Change:	<0.1%	<0.1%	<0.1%	<0.1%	<0.1%	<0.1%

IMPRESSION PROCEDURES:

One Step Technique:

Recommended Materials:

A) Putty and Light (Syringeable)
B) Heavy and Light (Syringeable)
C) Medium (tray) and Medium (Syringeable)
D) Multipurpose (tray) and Multipurpose (Syringeable)

1. Select and prepare a rigid or custom, perforated or non-perforated tray of sufficient size and height to permit at least 2-3mm. thickness of impression material surrounding the prepared and adjacent teeth.

NOTES:

For the regular setting times the tray must be seated within one minute after extruding Light, Medium, Multipurpose & Heavy viscosities, and within one minute after mixing the base and catalyst putty pastes. For the fast-setting times, the tray should be seated within the 30 sec after extruding Light, Medium, Multipurpose & Heavy viscosities.

* Certain latex gloves and hand lotions will inhibit the set of PolySil SH. Test beforehand or remove gloves and wash hands thoroughly before using putty.
* Certain Hemostatic agents (eg. ferric sulphate, aluminum chloride) found in retraction cords will also hinder the set of PolySil SH. Care must be taken to wash and dry contaminated areas before applying the syringe material.

2. Apply a thin, even layer of PVS tray adhesive from SciCan onto the surface of the tray and allow to dry for at least three minutes.

3. Dry, pack retraction cord(s) and isolate the prepared area with cotton rolls.

4. Dispense Heavy or Medium tray material directly into tray;
OR: Mix equal volumes of putty base and catalyst pastes and fill tray.

5. Dispense the syringeable material directly into an impression syringe OR use Intra Oral tips from SciCan directly on the mixing cannula for direct syringing from the dispensing system. NOTE: If the Heavy or Medium viscosities are being used, we recommend having two dispensing guns. The dental assistant can be loading the tray material while the dentist prepares and injects the syringeable material. Always remember to load the tray so that the area of preparation is loaded last. This assures that the freshest (longest working time) material will be in the area requiring maximum flow characteristics.

6. Remove the retraction cords and inject the syringeable material around the clean, dry preparations. Care should be taken to keep the tip immersed in material while syringing to avoid air pockets and ensure complete bonding of tray material. If using PolySil SH Putty, make indentations in the areas where the prepared teeth will be seated and fill these with additional injection material before seating. Seat the tray. Tray material should be unset when seated.

7. Allow the impression to sit in place until firm. It will be firm, resilient and non-tacky. Minimum removal time is at least three minutes in the mouth for the regular set time materials and 2 minutes in the mouth for the fast set.
8. Remove the impression tray by creating a downward pressure along the edge of the tray to break the seal.
9. Rinse the impression with water and blow dry.
10. Impression can be disinfected with any standard disinfectant, as per manufacturer's instructions, then rinsed and blown dry.
11. Impression may be poured after 30- minutes using vacuum-mixed die stone, or after one hour using hand-mixed die stone. If epoxy die material is used, it is best to wait 4 hours after mouth removal. PolySil may be copper or silver plated.
12. PolySil SH impressions may be poured several weeks after mouth removal without loss of accuracy.
13. Impression should be kept out of direct sunlight.
14. Always replace colour-coordinated lids on putty jars and leave used mixing tips on cartridges until next use.

Two Step Technique:

Recommended Materials: Putty and Light (Syringeable) or Medium (Syringeable)

1. Select and prepare a rigid or custom, perforated or non-perforated tray of sufficient size and height to permit at least 2-3mm. thickness of impression material surrounding the prepared and adjacent teeth.
2. Apply a thin, even layer of PVS tray adhesive from SciCan onto the surface of the tray and allow to dry for at least three minutes.
3. Dry and isolate the prepared field.

Step I: Take Preliminary Tray Impression:

Mix equal volumes of putty base and catalyst pastes and fill tray. Cover unset material with a plastic spacer sheet and seat tray. Insert tray while agitating slightly in all directions to make room for the injection material. Allow to set and remove from the mouth before it is completely set and permitted to bench-set while teeth are prepared for the final impression.

Step II: Take Final Impression:

1. Thoroughly wash the initial impression, blow dry and set aside.
2. Dry, pack retraction cord(s), if necessary and isolate the prepared teeth with cotton rolls.
3. Dispense the syringe material directly into an impression syringe OR use an Intra Oral Tip from SciCan directly on the mixing tip for direct syringing from the dispensing system.
4. Remove the retraction cords and inject the syringe material around the clean, dry preparation area. Care should be taken to keep the 'tip' immersed in the material while syringing to avoid air pockets and ensure complete bonding of the material.
5. Inject additional syringe material into the preliminary impression, fully covering the relieved areas, and the full arch of the tray made with spacers.
6. Reseat the tray being careful not to contact the prepared teeth with preliminary impression material.

NOTES:

* Tray must be seated within one minute after extruding Light, Medium, Multipurpose & Heavy viscosities, and within one minute after mixing the base and catalyst putty pastes. For the fast-setting times, the tray should be seated within the 30 sec after extruding Light, Medium, Multipurpose & Heavy viscosities.
* Certain latex gloves and hand lotions will inhibit the set of PolySil SH. Test beforehand or remove gloves and wash hands thoroughly before using putty.
* Certain Hemostatic agents (eg. ferric sulphate, aluminum chloride) found in retraction cords will also hinder the set of PolySil SH. Care must be taken to wash and dry contaminated areas before applying the syringe material.

7. Allow the impression to sit in place until firm. It will be firm, resilient and non-tacky. Minimum removal time is at least three minutes in the mouth for the regular set and 2 minutes for the fast set material.

8. Remove the impression tray by creating a downward pressure along the edge of the tray to break the seal.

9. Rinse the impression with water and blow dry.

10. Impression can be disinfected with any standard disinfectant, as per manufacturer instructions, then rinsed and blown dry.

11. Impression may be poured after 30 minutes using vacuum-mixed die stone, or after one hour using hand-mixed die stone. If epoxy die material is used, it is best to wait 4 hours after mouth removal. PolySil SH may be copper or silver plated.

12. PolySil SH impressions may be poured several weeks after mouth removal without loss of accuracy.

13. Impression should be kept out of direct sunlight.

14. Always replace colour-coordinated lids on putty jars and leave used mixing tips on cartridges until next use.

PolySil SH Dispensing Gun:

The PolySil SH Dispenser has two components:

1. Dispenser body
2. Dispensing Plunger

Assembly:

1. Press down the release lever at the rear of the dispenser body and insert the plunger into the dispenser from the front, making sure that the teeth (graduated surface) are facing down. Insert the plunger as far as possible and release the lever.
2. Load the PolySil SH Cartridge by releasing the dispenser cover and placing the rear of the cartridge into the custom fitted flange holder. Replace cover and snap into place.
3. Squeeze the dispenser handle to engage the plunger into the cartridge.
4. Remove cartridge cap and "bleed" a small amount of material before applying the mixing tip. Do not re-use cartridge cap.
5. Place mixing tip onto cartridge with a l/4 turn clockwise.
6. Squeeze the handle to dispense material from the cartridge. Material will self-mix in the custom designed mixing tip for direct placement into the tray or syringe.

NOTES:

* Always leave used mixing tip on cartridge until next use.
* Intra-Oral syringe tips from SciCan are available to fit directly onto mixing cannulas.
* 'PolySil SH Dispenser may be autoclaved in the 120° cycle in any conventional sterilizer, including the STATIM® 5000 and 5000S autoclaves, conventional autoclaves, chemical vapour sterilizers and dry heat sterilizers.

CAUTION: FEDERAL LAW RESTRICTS THE SALE OF THIS DEVICE BY OR ON THE ORDER OF A DENTIST.

Manufactured for:
Dent4You AG
Bahnhofstrasse 2
CH-9435 Heerbrugg

Distributed by:
SciCan Ltd.
1440 Don Mills Rd.
Toronto, Ontario
Canada M3B 3P9
T +1 416-445-1600

COLTENEGROUP

PolySil, TransBite, Controlled Flow and STATIM are registered trademarks of SciCan Ltd.