

Root Canal Sealer

PRODUCT DESCRIPTION

Pulpdent Root Canal Sealer is an ADA Accepted permanent root canal filling material which meets ANSI/ADA Specification No.57-2000 for Endodontic Sealing Material. It is specially manufactured so that the thickest mix can extrude through a 30 gauge needle for use with the Pulpdent Pressure Syringe, and so it can flow into irregularities and accessory canals for obturation of the complete root canal system. The sealer can also be placed in the canal with a lentulo paste filler.

Pulpdent Root Canal Sealer is radiopaque, tissue compatible, bacteriostatic and insoluble in the root canal. It is slow setting, fully hardening in 2 to 3 hours, and it expands slightly upon setting to create a positive seal. Slight overfills often resorb in 10 - 12 months. After setting, the sealer can be drilled for a post, and it can be removed with gates glidden or peeso drills if necessary. Pulpdent Root Canal Sealer resorbs with the roots in deciduous teeth and is recommended for use in primary and permanent teeth.

INGREDIENTS

Powder: zinc oxide, zinc stearate, calcium phosphate and barium sulfate.

Liquid: eugenol and Canada balsam.

TECHNICAL DATA

Standard: ANSI/ADA Specification No. 57-2000 for Endodontic Sealing Material

Mixing Ratio - Pressure Syringe: 2 scoops powder:2 drops liquid (1:1 Ratio)

Mixing Ratio - Lentulo Technique: 2 scoops powder:4 drops liquid, or multiples thereof.

Measuring Procedure: Fluff powder by inverting bottle. Measure level scoops of sealer powder. Do not pack powder into scoop. Hold sealer liquid bottle vertically downward when dispensing drops.

Working time: 30 minutes minimum

Setting Time: 2 – 3 hours

Storage: Store at normal room temperature (72°F / 22°C) away from direct sunlight.

COMPARISON CHART OF INSTRUMENTS & NEEDLES	
FILE SIZE IN THE APICAL 1-2 mm	PRESSURE SYRINGE NEEDLE GAUGE
15-30	30
50	25
60-80	22
90-110	18

HELPFUL HINTS:

- Pulpdent Root Canal Sealer is slow setting and allows ample time for cleaning the Pressure Syringe. Do not use zinc oxide and eugenol with the Pressure Syringe; it sets too fast.
- If Pulpdent Root Canal Sealer extrudes from the threaded areas at the back of the barrel or the needle hub, this is because the Root Canal Sealer was not mixed thick enough. Pulpdent Root Canal Sealer should be mixed to a thick, semi-dry, putty-like consistency for use with the Pressure Syringe.
- If sealer will be drilled to receive a post, place a gutta percha point to make a pilot hole for drilling.
- If the screw post is not removed from the Pressure Syringe barrel after use, the post and barrel will become permanently cemented together when the Root Canal Sealer sets.



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PULPDENT®

Root Canal Pressure Syringe®

Over 55 Years of Clinical Success



PRODUCT DESCRIPTION

The Pulpdent Pressure Syringe® provides precise placement of root canal sealer at the apex and total obturation of the root canal space. The clinician fills the apex first and then back fills the rest of the canal. This technique eliminates the difficulty of filling the apical portion of the canal inherent in all other conventional methods. A thick mix of Pulpdent Root Canal Sealer can be dispensed through a 30 gauge needle to provide access even to the narrowest canals. The original screw syringe design assures complete accuracy and fingertip control for root canal filling.

The complete Pressure Syringe Kit consists of the Pressure Syringe (hex shaped barrel plus threaded screw post), handle, 30 assorted Pressure Syringe Needles (18, 22, 25 and 30 gauge), Pulpdent Root Canal Sealer Kit (15 cc powder, 7.5ml liquid, mixing pad, scoop) and Wonder Orange Cleaning Solution (8 oz). All components are available separately in a variety of packaging options.

The Pressure Syringe is made of stainless steel and can be sterilized by any method. Pressure Syringe needles are blunt, disposable needles with a threaded metal hub. The needles are color coded: 30 ga = dark blue, 25 ga = red, 22 ga = light blue, 18 ga = green.

INSTRUCTIONS FOR USE:

- Using good endodontic procedures, open the root canal to a size 35-40 file within 1-2mm of the apex and taper the canal walls to a funnel shape. Ideally, it is best not to strip the apex or open the apical 1-2mm of the canal beyond a size 20-30 file.
- Measure the working length of the canal with a diagnostic X-ray. For the Pressure Syringe technique, the working distance from the apex should be 1-2mm. Select a Pulpdent Pressure Syringe Needle that wedges snugly into the apical portion of the canal at a distance of 1-2mm from the apex, see **Figure 1**. If the file size at the apex is a 15 - 30 file, select a 30 gauge needle. The needle may be pre-fitted at this time, and if so, place a root canal stop on the needle at the measured distance and place the needle back in the color sheath. See the Comparison Chart below to compare instrument and needle sizes.
- Separate the screw post from the pressure syringe barrel.
- Mix Pulpdent Root Canal Sealer to a thick, semi-dry consistency.
- Remove the white cap from the Pressure Syringe Needle and completely fill the hub of the needle with the thick mix of Pulpdent Root Canal Sealer. This can be easily done by placing the needle hub over the sealer and pressing it against the mixing pad, or by using a spatula.
- Screw the needle onto the Pressure Syringe barrel and hand tighten using colored needle sheath. Do not tighten with a wrench. To place more sealer in the Pressure Syringe, unscrew the Pressure Syringe Needle, and repeat this procedure.
- Slip the closed end of the handle onto the barrel so that it bends away from the patient's mouth, insert the screw post, and turn it clockwise until slight resistance is felt.
- Remove the colored sheath from the Pressure Syringe Needle. Slowly turn the screw post clockwise until sealer begins to extrude at the end of the needle. Reverse direction slightly to stop flow.
- Place the needle into the root canal 1-2mm from the apex. It is best if it fits snugly. The needle can be bent for easy access, but do not crimp the needle. See **Figure 1**.
- The screw post has four lines 90° apart indicating one-quarter turns. Turn the screw post one-quarter turn clockwise and wait 5 seconds. This fills the apex. An X-ray film can be taken at this time to check for a proper apical seal. See **Figure 2**.
- Before filling the remaining root canal space, withdraw the needle slightly to break contact with the canal walls. This assures that additional sealer will not be forced apically.** See **Figure 3**.
- Continue to turn the screw post slowly until sealer flows into the access cavity. See **Figure 3**.
- Place a cotton pellet in the access cavity to hold the sealer in place. Slowly withdraw the needle while continuing to turn the screw post. This will fill the space previously occupied by the needle. With the cotton pellet still in place, use an instrument to condense the sealer in the canal. See **Figure 4**.
- Pulpdent Root Canal Sealer is ADA Accepted for use alone in the root canal as a final filling material, or it can be used in conjunction with gutta percha. If sealer will be drilled to receive a post, place a gutta percha point to make a pilot hole for drilling.
- Clean the Pressure Syringe immediately after use. To clean the Pressure Syringe, remove and discard the needle. Empty the Pressure Syringe by turning the screw post clockwise as far as it can go. Wipe off excess Root Canal Sealer and separate the screw post from the barrel by turning the screw post counterclockwise. Use Wonder Orange Cleaning Solution to clean the screw post and barrel. A pipe cleaner can be used to help clean the inside of the barrel. Sterilize and store unassembled.

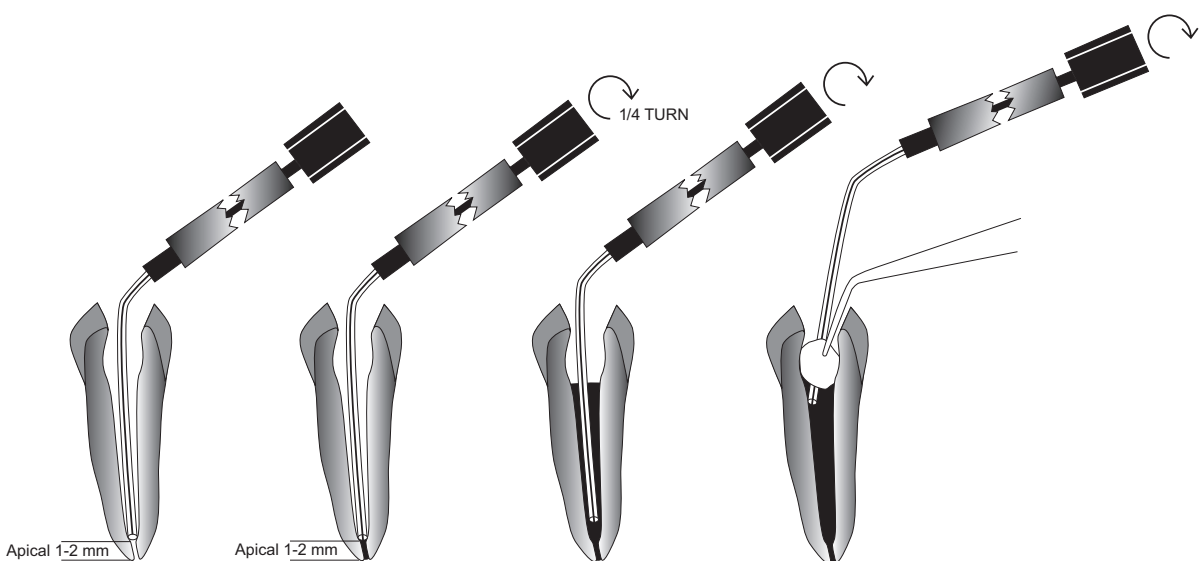


Figure 1

Needle should fit snugly 1-2mm from the apex.

Figure 2

Turn screw post 1/4 turn clockwise. Wait 5 seconds. This fills the 1-2mm at the apex.

Figure 3

Back off needle to break contact with sidewalls. Continue to turn screw post until sealer appears at orifice.

Figure 4

Place cotton pellet at orifice. Withdraw needle while turning screw post.