

Schottlander Opus Silver

Instructions for Use

INTRODUCTION

Opus Silver is a metal reinforced glass ionomer (glass polyalkenoate) restorative cement, base and liner reinforced with spherical silver alloy and a light grey colour. It is in accordance with EN ISO 9917-1:2007 Class 4.2.B. It is opaque and radiopaque.

The powder is mixed with water to produce a filling material which adheres to dentine, enamel and set amalgam. It has low thermal conductivity and a coefficient of thermal expansion which is close to that of the tooth. It is radiopaque, has high compressive strength and adheres both to tooth and set amalgam.

INDICATIONS

1. Fractured amalgam restorations.
2. Crown preparation – core build up.
3. Repair amalgam cores.
4. Class I and II cavities in deciduous teeth.
5. Repair to crown margins.
6. Root caries.
7. Posterior base.
8. Class I and II cavities in selected permanent teeth.
9. On the root surfaces for locating overdentures.
10. Long term temporary replacement for cusp(s).

CONTRA-INDICATIONS

In very deep cavities (approximately 0.5mm from the pulp) the dentine should first be covered with a calcium hydroxide liner.

CAVIITY PREPARATION

Opus Silver is adhesive to both dentine and enamel and therefore cavity preparation should be the minimum required for caries removal and prophylaxis. Undercuts and dove-tails are only necessary when the restoration is liable to be subject to high stress.

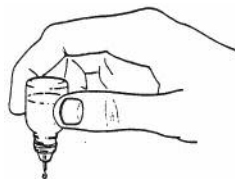
After cutting the cavity wash with water and dry thoroughly with oil-free air. Treat remaining areas of **exposed and uncut** dentine and enamel for 15 seconds with a conditioning fluid (25% polyacrylic acid) such as Opusfil Tooth Cleanser. Apply with a paint brush or cotton pledget, agitating the fluid continuously. Wash away with water and dry with compressed air.

PROPORTIONS

One drop of water per level **blue** scoop of powder (see below).

DISPENSING AND MIXING

Fill the water dispenser supplied **to a maximum of two-thirds** with distilled or clean drinking water and place the plastic insert with the metal tube into the neck. Invert the powder bottle to 'fluff' the contents to ensure correct volume. Measure out a level scoop onto a clean glass slab by drawing a flat blade across the surface, taking care not to compress the powder.



Holding the bottle vertically (see diagram), dispense one drop of water per scoop of powder. Divide the powder in half. Using a stainless steel spatula mix one half with the water taking about 5-10 seconds. Add the remaining powder, mixing quickly until a uniform putty-like consistency is obtained. Do not add powder in small increments.

NOTE: The correct powder/water ratio is 11:1 by mass at 23±1°C & 50±10% relative humidity. The recommended temperature range for preparation is 22-24°C.

MIXING AND WORKING TIME

Mixing time at 23°C 30 seconds
Working time from
start of mix at 23°C 1 min 45 seconds minimum

PLACEMENT

Apply the mixed cement using a suitable instrument. Ensure the cavity remains dry and free of salivary contamination. If a stainless steel matrix is used coat internal surface, preferably before placement, with separating medium such as Opusfil surface protection varnish or a thin film of petroleum jelly. Be careful not to apply this to the cavity margins if coated after placement.

FINISHING

Approximately 7 minutes after placement the restoration is sufficiently hard for finishing. Large excesses of material can be removed using a white stone or flexible disc which has been lubricated with petroleum jelly. Use discs lubricated with petroleum jelly for final finishing.

PROTECTION WHILST SETTING

In common with other glass ionomer restoratives the setting reaction of Opus Silver takes up to 24 hours to complete. Protect the surface with a good cavity varnish to allow this to take place out of contact with moisture.



Do not attempt to carve this material.
Lubricate abrasives with petroleum jelly.
Do not use a water spray.

CLEANING

Clean the filling instrument or spatula immediately using running water.

STORAGE

Store in a cool dry place away from direct sunlight. **Replace the cap of the powder bottle immediately after use as moisture contamination adversely affects the properties.** If the desiccant tablet turns pink discard the product.

HEALTH AND SAFETY

Powder contains polyacrylic acid. Avoid contact with eyes. In the event of accidental contact rinse immediately with plenty of water and seek medical advice.

For further information request Safety Data Sheet.

TESTING

For test purposes the powder: liquid ratio is 1:10g: 0.10g at $23\pm 1^{\circ}\text{C}$ and $50\pm 10\%$ relative humidity. The net setting time is maximum 3 minutes from end of mix at $36\text{-}38^{\circ}\text{C}$.

LOT NUMBERS

The lot number and expiry date are shown on all outer containers.

This product is specifically formulated for use in dentistry.

*Opus is an internationally registered trademark of
Davis Schottlander & Davis Limited.*