

PRODUCTION SPECIFICATIONS

TRIM SIZE: 259mm w x 55mm h
 STOCK: 10 pt card stock, coated, no adhesive
 FINISHED SIZE: Approx. 59mm w x 55mm h
 IN HOUSE PRINTING CAPABILITY: NO

FP 00766

BLEED: NO
 INKS: PMS Red(032) & Black
 # OF FOLDS: 2
 VARNISH: yes

Magenta die cut line for shape only does not print

Cyan for imprint only does not print

Indications for use:

Pors-on plus is a noble, micro-fine grain porcelain alloy, which may be used with most commercial dental porcelains. The well balanced formulation of this palladium-gold-silver alloy provides excellent tarnish and corrosion resistance significantly. Pors-on Plus features excellent physical properties and is suitable for bridges of any length.

Contraindications: None known.

Warning: Exposure to alloy dust or fumes may cause eye irritation ventilate work area when processing this alloy.

Precautions: Use proper safety equipment and a certified industrially ventilate work area when processing this alloy.

Adverse Reactions: Exposure to alloy dust or fumes may cause eye irritation and/or respiratory complications.

Additional information is available on request.

For dental use only.

Technical Data¹**Lot #**

Melting range	CTE-range (WAK)		Vickers hardness HV5	Tensile strength* MPa	0.2% Yield strength* MPa	Elongation* %	Density g/cm ³
	25-500 °C 77-932 °F	25-600 °C 77-1112 °F					
1170-1255 °C 2140-2290 °F	14.6	14.9	f: 250 h: 250	f: 760 h: 880	f: 445 h: 605	s: 25 h: 15	12.0

f = after porcelain application; h = hard
 *To convert from MPa to psi, multiply by 145
 Tensile strength tests performed in accordance with ISO 9693
 Burnout Temperature: 1650 °F (900 °C); Casting Temperature: 2550 °F (1400 °C).
 Pre-Solder: YPG or Degudent G-1; Flux: DS-1.
 Post-solder: Regular White or Degulor® 2 Solder; Flux: T-Flux or DS-1.

¹ Technical Data for reference only.

RMCM# 743-944 Rev. 02/11

USA 0650708

See Reverse Side for Working Instructions!

Dental Ceramic Alloy
Type: 4

Color white
 US Reference No. 155055

Pd: 47.5%
 Ag: 27.5%
 Au: 15.5%
 Sn: 5.8%
 In: 2.3%
 Zn: 1.3%
 Ru: 0.1%



Weight
1 T. oz.
31.1
grams

Micro-Fine Grain Alloy

Pors-on™ Plus

Manufactured for:
Dentsply International
 DENTSPLY Ceramco
 570 West College Ave
 York, PA 17405-0872
 1-800-487-0100
 1-717-699-4190
 Made in Germany



Pors-on Plus

Instructions for use

Step by Step Instructions:

1. Design:

The minimum crown wall thickness should be 0.3mm for single crowns and 0.5mm for bridge abutment crowns.

2. Sprues:

Single Crowns: Sprue directly onto the thickest part of the pattern using 8 or 6 gauge (3.5–4.0 mm diam.) sprues, 10–15 mm in length.

Bridgework: Attach 8 or 6 gauge (3.5–4.0 mm diam.) sprues to wax pattern.

Connect the sprued patterns to a 6 or 4 gauge (4.0–5.0 mm diam.) runner bar, measuring the length of the bridge span. Use several 8 or 6 gauge sprues from the runner bar to the crucible cone former.

3. Investment:

Use phosphate or silicate-bound investments; for example Deguvest® F.

4. Wax Elimination

At 600 °F (315 °C) until wax is completely eliminated.

5. Burnout:

Heat to 1650 °F (900 °C) and heat-soak for 20–60 minutes depending on size of ring. More time is required with additional rings.

6. Casting:

Casting temperature: 2550 °F (1400 °C). **Do not use carbon crucibles.** When torch melting continue heating for additional 5–10 seconds (for electric melting use 20–40 seconds). After casting, allow ring to **BENCH COOL** to room temperature. Use at least 50% new alloy! Veriflux® may be used to reduce oxide formation during melting.

7. Finishing:

Use only carbide burs and ceramic bound stones. Sandblast with non-recyclable aluminum oxide 110 microns and clean thoroughly.

8. Degassing:

Degas at 1800 °F (980 °C) without vacuum and hold for 5 minutes. Sandblast with non-recyclable aluminum oxide, 110–150 microns at 28 psi. Clean thoroughly.

9. Porcelain Application:

Follow manufacturer's instructions. To enhance the bonding properties the opaque should be fired in two layers. Apply the first layer very thin and the second layer to normal thickness. To harden following porcelain firing, heat to 1200 °F (650 °C), hold for 15 minutes and cool in air.

10. Pre-Soldering:

YPG 1950 °F (1065 °C) or Degudent G 1 1886 °F (1030 °C); Flux: DS 1.

11. Post-Soldering:

Use Regular White, 1365 °F (740 °C) or Degulor® 2 Solder, 1382 °F (750 °C). Flux: T-Flux or DS-1.