

SPECTRA

COLLECTION 2026

DENTAL RESINS

Every Application.
A Resin to Match.

THE SPECTRA MATERIAL COLLECTION



MASTER MODEL

TEMPORARY

SURGICAL GUIDE

GINGIVA



FLEXIBLE

PERMANENT CROWN

DENTURE BASE

CAST & ULTRA CAST

SPECTRA CERAM TRADING L.L.C.

PRODUCT COLLECTION & TECHNICAL REFERENCE

www.spectra-ceram.com

One range. Eight directions.

Choose by application, then confirm the exact material and validated processing workflow.

03 MASTER MODEL

Defined anatomical detail|A choice of six model colours|A stable visual reference for the digital workflow.

04 TEMPORARY

Four tooth-coloured shades|Anatomical detail for provisional designs|Digital design-to-print flexibility.

05 SURGICAL GUIDE

Clear appearance for visual inspection|Detailed guide geometry|Digital planning integration.

06 GINGIVA

Pink tissue-like presentation|Soft and Hard options on the supplied label|Supports evaluation of emergence profiles.

07 FLEXIBLE

Flexible material concept|Pink finish|Supports designs requiring deformation.

08 PERMANENT CROWN

Four labelled tooth shades|Digital crown design workflow|Consistent SPECTRA range presentation.

09 DENTURE BASE

Two pink colour options|Digital base design|Detailed reproduction of designed contours.

10 CAST & ULTRA CAST

Digital pattern production|Two clearly identified product options|A dedicated casting workflow at the end of this catalogue.

All eight product labels list 500 g and 1 kg packs. Swatches are illustrative; printed and screen colours are not shade standards.

MASTER MODEL

Precision starts with the model.



APPLICATION

Dental models for laboratory planning, checking fit and presenting restorative work.

MATERIAL HIGHLIGHTS

- Defined anatomical detail
- A choice of six model colours
- A stable visual reference for the digital workflow

COLOURS & OPTIONS



Grey



Almond



Yellow



Skin



White



Black

PACKS

500 g / 1 kg

Model formulations in the technical reference are distinct. Confirm the exact Master Model formulation before selecting a print profile.

TEMPORARY

A considered provisional workflow.



APPLICATION

Provisional crown and bridge workflows, subject to the product-specific instructions for use.

MATERIAL HIGHLIGHTS

- Four tooth-coloured shades
- Anatomical detail for provisional designs
- Digital design-to-print flexibility

COLOURS & OPTIONS



Bleach



A1



A2



A3

PACKS

500 g / 1 kg

The supplied technical sheet uses the name C&B; Its values are shown as a reference profile; equivalence to this Temporary product must be confirmed.

SURGICAL GUIDE

Clarity for guided planning.



APPLICATION

Patient-specific dental surgical guides within a validated guide design and processing workflow.

MATERIAL HIGHLIGHTS

- Clear appearance for visual inspection
- Detailed guide geometry
- Digital planning integration

COLOURS & OPTIONS



Clear

PACKS **500 g / 1 kg**

Use only with the validated washing, curing and sterilisation instructions for this exact resin. These protocols were not supplied with the label.

GINGIVA

Soft-tissue detail, made visible.



APPLICATION

Gingival masks and soft-tissue representation on dental models.

MATERIAL HIGHLIGHTS

- Pink tissue-like presentation
- Soft and Hard options on the supplied label
- Supports evaluation of emergence profiles

COLOURS & OPTIONS



Red Pink



Dark Red

PACKS **500 g / 1 kg**

Soft and Hard are firmness variants. The supplied Gingiva Mask technical profile does not identify which firmness variant was tested.

FLEXIBLE

Flexibility in a pink finish.



APPLICATION

Flexible printed components and demonstration pieces where a pliable material is required.

MATERIAL HIGHLIGHTS

- Flexible material concept
- Pink finish
- Supports designs requiring deformation

COLOURS & OPTIONS



Pink

PACKS **500 g / 1 kg**

No dedicated technical data sheet was supplied. Confirm permitted applications, elastic properties and processing settings before use; do not substitute Denture Base settings.

PERMANENT CROWN

Tooth-coloured restorative design.



APPLICATION

A crown resin product supplied under the Permanent Crown name. Final indications and clinical use require its own validated instructions.

MATERIAL HIGHLIGHTS

- Four labelled tooth shades
- Digital crown design workflow
- Consistent SPECTRA range presentation

COLOURS & OPTIONS



Bleach



A1



A2



A3

PACKS

500 g / 1 kg

A dedicated Permanent Crown technical sheet and validated clinical processing protocol were not supplied. Temporary/C&B; values do not establish permanent-restoration performance.

DENTURE BASE

A foundation in natural pink.



APPLICATION

Printed denture-base workflows, subject to the validated product instructions.

MATERIAL HIGHLIGHTS

- Two pink colour options
- Digital base design
- Detailed reproduction of designed contours

COLOURS & OPTIONS



Pink



Dark Pink

PACKS 500 g / 1 kg

The reference technical sheet groups Tray and Denture Base print settings. Mechanical values for Denture Base are listed separately in this catalogue.

CAST & ULTRA CAST

From printed pattern to metal.



APPLICATION

Sacrificial patterns for dental investment casting, followed by resin-compatible investment and controlled burnout.

MATERIAL HIGHLIGHTS

- Digital pattern production
- Two clearly identified product options
- A dedicated casting workflow at the end of this catalogue

COLOURS & OPTIONS



Cast · Green



Ultra Cast · Yellow

PACKS **500 g / 1 kg**

D-CAST parameters are reference data for the supplied casting profile. No separate Ultra Cast settings were supplied; do not assume both products use the same cycle.

Know your profile.

Product identity comes before exposure time. Reference profiles are not interchangeable.

SPECTRA PRODUCT	SOURCE PROFILE	STATUS
Master Model	Ortho / Pro / Water-Washable Ortho	Exact formulation not identified
Temporary	C&B;	Product equivalence to confirm
Surgical Guide	Surgical Guide	Reference profile available
Gingiva	Gingiva Mask	Firmness variant not identified
Flexible	Not supplied	Dedicated settings required
Permanent Crown	Not supplied	Dedicated settings required
Denture Base	Denture Base	Reference profile available
Cast / Ultra Cast	D-CAST / not supplied	Cast match to confirm; Ultra separate

Source: supplied dental technical reference, 2023. Values are starting references for matching materials, not universal presets or evidence of clinical certification.

Print settings

A controlled starting point for matching resin profiles.

REFERENCE PROFILE	BOTTOM EXPOSURE	NORMAL EXPOSURE
Ortho Model · IPA	25–35 s	2.5–3.5 s
Water-Washable Ortho	25–35 s	2.5–3.5 s
Pro Model	20–30 s	2.5–4.5 s
Surgical Guide	20–30 s	4–6 s
Gingiva Mask	20–30 s	4–8 s
C&B;	20–30 s	3–6 s
Denture Base	20–30 s	3–6 s
D-CAST	30–50 s	3–5 s

Common reference conditions

Layer height: **0.05 mm** · Bottom/normal lift distance: **6 mm**

Bottom lift speed: **60 mm/min** · Normal lift: **80 mm/min**

Retract speed: **150 mm/min** · Rest after retract: **2–3** (unit not stated in source).

Test platform: ELEGOO MARS 3, 6.6-inch monochrome LCD; irradiance 3,500–4,500 $\mu\text{W}/\text{cm}^2$. Confirm printer, resin variant and batch before use.

Calibrate the workflow

Printer size, separation force and material behaviour all influence successful printing.

Lift distance by screen size

SCREEN SIZE	REFERENCE LIFT
Below 7 inches	6 mm
7–10 inches	8–10 mm
10.1 inches	11 mm
13.3 inches	14 mm
15 inches	15 mm

These distances apply to the conventional release-film setup described in the source. Gingiva Mask calls for a 20–30% increase in lift distance. Validate against the actual machine and film.

Bottom layers: a worked example

Bottom layer count = bottom thickness ÷ layer height + 1.

For 0.40 mm at 0.05 mm per layer: **9 bottom layers**.

Mix resin thoroughly before printing. Run a calibration specimen whenever material, printer, light output, layer height or release film changes. Check detail, fit and separation before production.

Mechanical reference

Selected reported values. Results depend on formulation and specimen conditioning.

PROPERTY	ORTHO	PRO	WATER-WASHABLE	GUIDE
Tensile strength / MPa	37.88	25.9	31.44	26.78
Flexural strength / MPa	57.91	22.2	40.82	25.19
Flexural modulus / MPa	1699.7	616.4	1091.45	761.26
Elongation at break / %	6.41	25.5	7.65	24.45
Hardness / Shore D	80–88	80–85	80–85	80–83

Read the values in context

The three model profiles are not confirmed as equivalent to the Master Model label. “Guide” refers to the Surgical Guide technical profile.

Reported mechanical values carry a $\pm 10\%$ tolerance; hardness is presented as a range. Testing references: ASTM D638 (tensile), D790 (flexural) and D2240 (hardness).

No mechanical values are supplied for Flexible, Permanent Crown or Ultra Cast. Do not transfer values from another resin.

Material performance

Reference values for the C&B,, Gingiva Mask, Denture Base and D-CAST profiles.

PROPERTY	C&B,	GINGIVA	DENTURE BASE	D-CAST
Tensile strength / MPa	30.00	1.33	25.62	Not listed*
Flexural strength / MPa	30.98	—	25.48	39.81
Flexural modulus / MPa	927.13	—	693.51	811.08
Elongation at break / %	32	110.28	17.65	8.85
Hardness / Shore D	80–90	Not listed*	80–85	85–88

Mechanical values: $\pm 10\%$; hardness: reported range. “—” means no result is given in the source. *Values requiring clarification were excluded rather than corrected by assumption.

Test specimen conditioning

Source test environment: $23 \pm 2^\circ\text{C}$; relative humidity $50 \pm 5\%$. Specimens were post-cured in water for 1 minute per side at 405 nm and 200 mW/cm².

These are test-coupon conditions. They are not a validated clinical post-curing protocol for every SPECTRA resin.

After the print

Cleaning and curing must follow the exact material instructions.

01 Clean with the right medium

Use the resin-specific cleaning method. The supplied reference distinguishes IPA-cleanable profiles from water-washable model resin. Keep wash stages controlled and avoid prolonged soaking.

02 Dry before the next stage

Remove residual wash liquid and inspect recesses, surfaces and support-contact areas. Use equipment suitable for the selected cleaning medium.

03 Validate the cure

Light wavelength, irradiance, exposure time and part geometry affect final properties. Permanent Crown, Surgical Guide and other clinical applications require their own validated processing instructions.

Wear suitable protective equipment and follow the resin safety data sheet. Collect resin-contaminated wash liquid for appropriate disposal. This catalogue is a product reference, not a replacement for product-specific instructions.

The castable workflow

Printed geometry becomes a sacrificial pattern for investment casting.



CAST Green / ULTRA CAST Yellow

Design the restoration, print the pattern, clean it and prepare a sprue assembly. A compatible investment then supports controlled burnout and metal casting.

01

PRINT

02

INVEST

03

BURN OUT

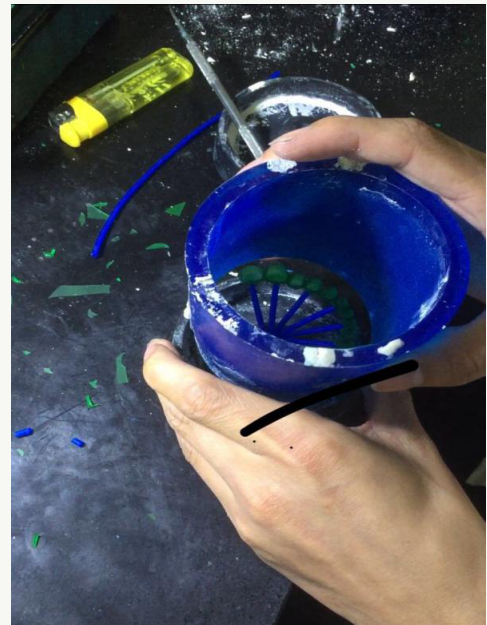
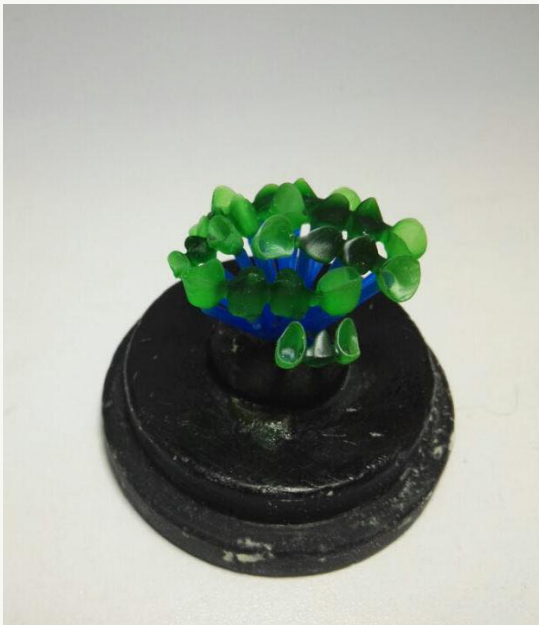
04

CAST

The following pages summarise the supplied casting guide. Its cycle must be confirmed for the exact resin, investment, ring configuration and alloy. Ultra Cast has no separate validated cycle in the supplied files.

Prepare. Sprue. Invest.

Clean patterns and controlled positioning support a reliable casting process.



Pattern preparation

Clean the pattern with the prescribed IPA process and dry it. Remove unnecessary supports and clean again. The casting guide limits optional post-curing to no more than 1 minute; confirm the exact resin instructions before applying this limit.

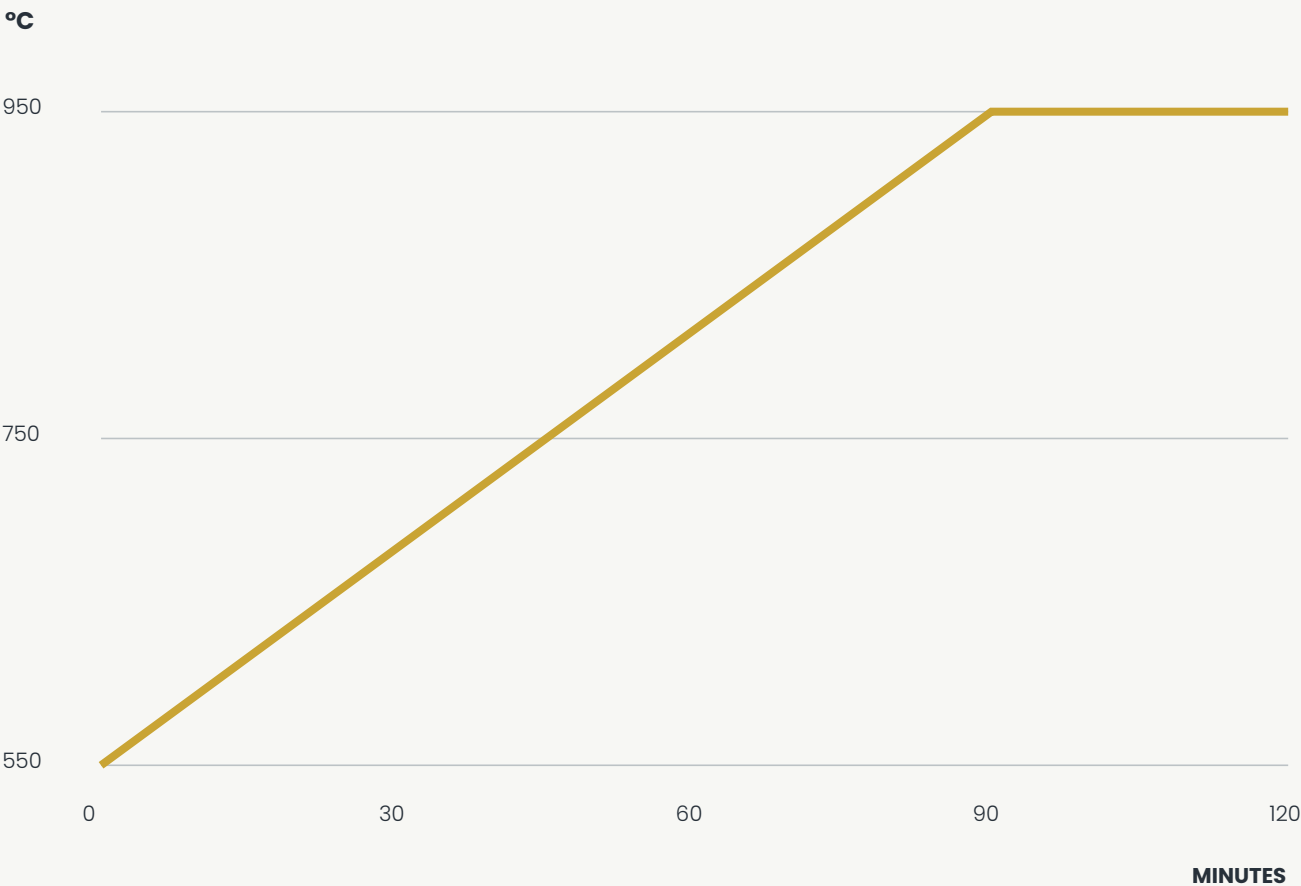
Position within the ring

Attach suitable wax sprues and centre the assembly. The supplied guide specifies clearance greater than 5 mm between the pattern and ring. Vacuum-mix a resin-compatible investment and pour carefully without directing the stream onto fine patterns.

Investment selection, liquid/powder ratio and setting time must follow the investment instructions. Use an investment rated for the intended burnout temperature.

Reference burnout cycle

A source-based thermal profile—not a universal furnace programme.



STAGE	REFERENCE
Entry temperature	550°C
Ramp	550 950°C over 90 minutes
Hold	950°C for 30 minutes

Derived ramp rate: approximately 4.44°C/min. Confirm compatibility with the resin, investment and alloy; furnace performance and ring size may require a validated alternative cycle.

Reveal the final form

Controlled casting. Careful finishing. A complete digital-to-metal workflow.



Cast, cool and finish

The supplied guide illustrates centrifugal casting, followed by natural cooling, divesting and sandblasting. Select the alloy casting conditions, cooling sequence and finishing process according to the alloy and investment instructions.

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