



Repli-Cast™ is a high-quality, all-purpose casting and pressing investment that works well with both standard and rapid burnout. You have more command with Repli-Cast™ due to the wider range of expansion controls. Repli-Cast™ is a smooth pouring material that gives great surfaces and divests easily.

### PHYSICAL PROPERTIES

LIQUID / POWDER RATIO	22 ML / 100 G
WORKING TIME	6 - 8 MINUTES
SETTING EXPANSION	1.6 %
THERMAL EXPANSION	0.65 %
COMPRESSIVE STRENGTH	1,350 PSI (9.2 MPa)

		TWO-MINUTE MIX TIME		100 GRAM	
		LIQUID CONCENTRATION	LIQUID ML	WATER ML	22 ML :: 100 G
<b>EXPANSION</b>	<b>ALLOY</b>				
	MORE		100%	22.0	0.0
			90%	20.0	2.0
	OPTIMUM	BASE	80%	18.0	4.0
		NOBLE	75%	16.5	5.5
		HIGH NOBLE	70%	15.0	7.0
	LESS		60%	13.0	9.0
			50%	11.0	11.0
	<b>CERAMIC</b>				
	MORE		90%	20.0	2.0
			80%	18.0	4.0
	OPT.	CROWNS, VENEERS, INLAYS, MODs	70%	15.0	7.0
60%			13.0	9.0	
LESS		50%	11.0	11.0	
		40%	9.0	13.0	

### MIXING

- ▶ Prepare liquid at suggested concentration following the mixing chart listed above or on the back of each envelope. Distilled water is recommended for dilution.
- ▶ Rinse bowl out with water and shake out excess. Always use separate mixing bowls for phosphate and gypsum investments.
- ▶ Add measured liquid to mixing bowl. Incorporate powder by hand spatulation for 10 -15 seconds.
- ▶ Mechanical mix under vacuum on slow speed (350-600 RPM) for 2 minutes (120 seconds). Higher RPM mixers may require decreased mix time (90 seconds).

**For optimal results, store and use powder and liquid at room temperature—between 20° C / 68° F and 25° C / 78° F.**

## BENCHSET

- ▶ Benchset for 15 minutes.
- ▶ Rinse the hot mold under tap water and trim glaze off the top of the mold before burnout.
- ▶ For optimal results, place in a preheated oven within 30 minutes of investing.

**Molds allowed to set more than 12 hours should be re-wet prior to burnout by soaking in water for 1-3 minutes.**

## BURNOUT

### Rapid Technique (Pre Heated Oven)

- ▶ Place Molds in preheated oven at alloy manufacturer's recommended temperature—up to 925° C / 1,700° F\*. For higher temperatures place molds in oven at 925° C / 1,700° F then heat to final temperature at 14° - 20° C / 25° - 40° F per minute.
- ▶ Heat soak at final temperature for 30 minutes. Add 10 minutes per each additional mold.

**\*Maximum preheat entry temperature for the metal ring is 870° C / 1,600° F.**

### Standard Technique (Cold Oven)

- ▶ Place molds in oven at room temperature. Heat to desired temperature at 14° - 20° C / 25° - 40° F per minute.
- ▶ Heat soak at final temperature for 30 minutes. Add 10 minutes per each additional mold.

## CASTING (ALLOY)

- ▶ Upon removal from the oven, immediately cast according to the alloy manufacturer's instructions.

## PRESSING (PRESSABLE CERAMICS)

- ▶ Press according to ceramic manufacturer's recommendations.
- ▶ Use 200 gram mold for restorations requiring two ingots.

## DIVESTING

- ▶ Allow metal castings and ceramic pressings to cool completely prior to divesting. **NOTE:**
  - ▶ For small volume mixes (less than 100 grams) decreasing the liquid/powder ratio approximately 2 mL/100 gram will increase expansion and improve surface quality.
  - ▶ For tight fits—increase liquid concentration or increase mix temperature; if using metal rings, you may also use a double liner.
  - ▶ For loose fits—decrease liquid concentration or decrease mix temperature (refer to Expansion Ratio Chart).
  - ▶ For large molds containing complex restorations or plastic sprues, runner bars or copings, the standard technique described above or a two-stage burnout technique is recommended.