

Clay to ceramic 101 workshop: Decorating without glaze

Workshop materials:

- 1-2 kg smooth clay without grog (or whatever you have on hand)
- ½ cup compatible slip (purchased or made)
- 10 grams of 1 or 2 colours ceramic stains or oxides (optional)

Suggested equipment

- hand-building clay tools
- water and sponge
- stylis- double ended
- clean up tools/ scalpel
- sgraffito tool- for fine carving
- rubber kidney
- metal kidney
- scoring tool e.g. fork, needle tool, combed metal kidney
- metal dessert spoon
- fan brush, fine line brush
- slip trailer (optional)

Suppliers SE Qld/ Northern Rivers

- [Picassos \(South Gold Coast\)](#)
- [Pottery Supplies, Milton](#)
- [Ipswich Pottery Supplies](#)
- [Clay Shed, Sunshine Coast](#)
- [Northern Rivers Pottery Supplies](#)

Larissa's recommended clays and slips

Clay body	Firing temperature	Clay	Compatible commercial slip (usually sold in 10 litre buckets)
Earthenware clay	generally maximum temperature 1100 °C	Keane White Earthenware #37, Paper Earthenware	Keane Polar White Slip
		Clayworks School White	Clayworks Premium White Earthenware Slip
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		Walker WE (earthenware)	Walkers white earthenware slip
Mid-fire clays	typically fire to 1200/1220 °C	Keane mid fire #6	Keane IME-3 Casting slip
		Walkers White Earthenware	Midfire Clay Walkers midfire slip
		Keane Lumina midfire	Lumina mid fire slip
		Clayworks cone 6 White	Northcoate White Mid Fire Slip
		Stoneware/Earthenware blend SWE (max 1240oC)	
Stoneware Clays	N.B. many clays say they will fire 1000-1280°C. Top temperatures of 1280/1300°C means they <i>vitriify</i> at stoneware temperatures. If you don't plan to use this clay for eating or water-holding functions, it's fine to fire them at earthenware temps.	Walkers White Pottery Walkers Fine White Stoneware Walkers #10	Walkers No 10 Casting Slip
		Walkers PB103 white stoneware Walkers Superior White Porcelain	Walkers Superior white porcelain slip
		Walkers School Earthenware/stoneware Keane Stoneware #5	
		Keane Stoneware #7	Keane J-Cast Slip
		Keane Porcelain #590 Stoneware/porcelain blend Keane Lumina	Lumina (high fire slip)
		Clayworks JB1porcelain	
		Clayworks Fine White Stoneware JB3	
		Clayworks LGH fine stoneware	Clayworks WSS Casting Slip

Slip recipe (small amount)

You can make your own slip using your available clay.

Ingredients

- 1-2 kg of white smooth clay (no grog)
- Water
- Dispex N40 (a deflocculant used in conjunction with Sodium Silicate. It keeps particles in suspension thereby eliminating the addition of great amounts of water to attain fluidity.)

Method

- a) Cut clay in thin slices or chunks – thinner the better.
- b) Dry the clay – directly in the sun is fine. It must be bone dry.
- c) Crush the bone-dry clay. To avoid dust, place in plastic bag and roll with a rolling pin, or through your slab roller, shake and roll again until its almost powder like.
- d) Weigh the dry clay powder
- e) The ratio of dry clay to water is 100 parts clay : 36 parts water. i.e. 100gms of clay:36gms of water. Make sure you tare your weights with your containers.
- f) Mix 0.5% dispex into the water for every 100grams of clay
- g) Pour powdered clay into the water and Dispex
- h) Allow clay to slack down
- i) Use a hand blender or a paint mixer on a drill to blend larger volumes.
- j) Mix until the slip is runny like cream

Slip recipe (large volume)

	Minimum	Maximum
Powdered clay	25 kilos	25 kilos
water	11.5 litres	12.5 litres
N42 Sodium Silicate	60gm (45ml)	80gm (60ml)
Dispex N40	5gm (3.5ml)	10gm (7ml)

Litres of slip produced	19 to 20
Aim litre weight/grams per litre	1725gm/litre

Recommended method for large volume quantities above

1. Add water to mechanical mixer.
2. Add minimum Sodium Silicate N42 or diluted 50/50 with warm water.
3. Mix and put aside minimum Dispex N40 diluted 50/50 with warm water.
4. Begin mixing and add some of the clay. The slip will gradually thicken.
5. Add a small amount of Dispex N40 mixture to maintain fluidity.
6. Then add more clay.
7. Continue this process until all the clay is in the mixer and a smooth creamy consistency is obtained. The maximum amount of Dispex N40 should not have been required at this stage.
8. Weigh 1 litre of slip to check the Aim litre weight/grams per litre.
9. If litre weight is higher than 1725gm, add water.
10. If litre weight is lower than 1725gm, add clay.

Ceramic Stains or Oxides

- How much stain do I add to my clay body?
Generally speaking, use a ratio of 1 part stain to 10 parts clay. This means if you are using 100 grams of clay, you should add at least ten grams of stain.
- Note: If using stoneware clay, be aware of the maximum temperature you can fire ceramic stains to until the colour burns away.
- Read more about ceramic stains here
<https://www.pottersuppliesonline.com.au/colours/stains-1>

Equipment examples

Stylis double-ended



Slip trailer



Slip Trailer 1 Piece 20cc
\$5.80 AUD Sold Out



Slip Trailer 1 Piece 30cc
\$6.85 AUD



Slip Trailer 2 Piece 50cc
\$14.15 AUD Sold Out

1 in stock



Slip Trailer 2 Piece 150cc
\$19.95 AUD



Xiem Customisable Applicator
Complete Kit (36 Pieces)
\$52.11 AUD



Xiem Customisable Applicator
Kit 4oz 16 Gauge Tips
\$15.55 AUD Sold Out



Xiem Customisable Applicator
Kit 2oz 18 Gauge Tips
\$12.94 AUD Sold Out



Xiem Customisable Applicator
Kit 8oz 14 Gauge Tips
\$18.16 AUD

2 in stock



Xiem Precision Applicator



Xiem Precision Applicator 1oz



(5) 14 GAUGE TIPS

Xiem Applicator Tips 14-Gauge

5 in stock



Xiem Precision Applicator 3oz