

NORTHCOTE POTTERY SUPPLIES
TECHNICAL TIPS AND PRODUCT INFORMATION #11

EARTHENWARE GLAZING

- Earthenware glazes should NEVER be fired under a reduction atmosphere in a gas kiln without the expectation that colours and effects will be markedly different from the supplier's advertised colour.
- An average heating rate for glazes would be between 70°C - 100°C/hr resulting in an 11 – 16 hour firing. Firing much slower or faster than this could alter the performance of glazes.
- Soaking glaze firings at the top firing temperature is equivalent to firing to a higher temperature. NB THIS MAY CAUSE GLAZES TO BE OVERFIRED AND CHANGE THEIR PERFORMANCE
- Glazes cannot be combined (stirred together) with any assurance that the resulting mixture will be (1) a proper glaze and (2) the colour you thought you would create. Each glaze is a different chemical formula and blending does not necessarily work.
- Ensure that cone temperature equivalencies are up-to-date with Orton publications.

BRUSH ON GLAZE

- Should always be applied according to the manufacturer's instructions on the container. Read them before you start.
- Should only be applied to bisque fired clay (unless tested under your studio conditions for raw glazing).
- Should be fired between 1060°C - 1100°C (NB cadmium based glazes prefer 1060°C).
- Should be stirred well before application to ensure even distribution of materials and colourants.
- Should only be applied to dust and grease free surfaces. Sponge surfaces before glazing to be sure they are clean.
- Each coat of glaze should be applied with a large, soft Hake brush. An average coat of glaze is equivalent to the thickness of a coat of house paint applied to a wall.
- Insufficient application of glaze will give 'stingy' glaze results, i.e. insufficient colour, gritty surfaces, bare spots and at times, different colours to those expected.
- Application of excessive amounts of glaze will result in glazes running on vertical surfaces and possibly stick the pottery item to the kiln shelf. On horizontal surfaces over application will result in excessive pooling in recessed areas and possible cracking of the glaze/pottery item, or sometimes beading/crawling of the glaze to give an orange peel effect.
- Can be applied over other earthenware glazes for new glaze effects which may differ from the individual effects of each individual glaze.
- Best applied to earthenware and terracotta clays only (not raku, mid-fire, stoneware or porcelain). Coloured opaque glazes perform better on terracotta than transparent glazes because they block out the dark clay colour.
- Should be stored in a cool, dark place to ensure a long shelf life.
- Do not apply glaze to the foot of pots unless firing pottery items on ceramic stilts at temperatures less than 1120°C.
- Wipe any excess glaze off the foot of pottery while moist and before firing, otherwise pots will stick to kiln shelves during firing.
- Dried glaze cannot be re-wet. It is permanently dry from the binders it contains and will never soften for re-use.
- Wash brushes out in water unless the glaze in them has fully dried.

POWDERED GLAZE

- Should be mixed by sprinkling glaze over water (approximately 1kg glaze / 750ml water) and then adjusted if more water is necessary.
- Should be suspended with glaze anti-set to prevent settling (approximately 2ml anti-set / 1 litre water).
- Should be mixed to the consistency of milk (not cream) and pottery items dipped for no more than 3 seconds (count "1 and 2 and 3 and...").
- Should be run through an 80# - 100# sieve to ensure all lumps are removed before use.
- Should be continually stirred during use to prevent settling and glaze separation (every 2-3 minutes).
- Store with a sealed lid out of heat/sunlight.
- Glazes have an indefinite shelf life unless polluted with other materials. Glaze which has dried out can always be re-wet to the desired consistency and used again.
- Always mark glaze containers with the glaze product code, as well as the name and firing temperature.
- Always put a test sample of glaze through firing before glazing any other ware to ensure product suitability and performance under your individual studio conditions and with your chosen clay body.
- Do not leave any glaze on the bottom of pottery items – sponge the soft powdery glaze off with water. Sponge glaze back to at least 5mm from the bottom of the pot.