

TOOLS/INGREDIENTS

- · 25kg Lumina / Mid Fire Lumina
- · 20L bucket with lid (clean)
- · Mechanical mixer
- · 10kg clean water

- · Accurate scales
- 40g Sodium Silicate N42 grade*
- · 40g to 60g Dispex N40 grade*
- · 2 clean plastic cups to weigh the deflocculant

METHOD

- 1. Accurately measure 10kg of clean water into mixing tank/bucket.
- 2. Turn on mixer and add 40g Sodium Silicate to the water. Turn off mixer when done.
- 3. Add half of the 25kg powder to the water and allow to slake for approximately 10 minutes.
- 4. Start mixing the slip using the mechanical mixer. The slip will start to appear thick.
- 5. Mix 40g of Dispex with 200ml of water, and add a little at a time to the slip while continously mixing to keep the slip fluid.
- 6. Add the remainder of the powder and mix for one hour or more until homogenous.
- 7. Check the density (litre weight) it should be under 1750g per litre. If it is higher, add water. Desirable density is subjective and will vary according to the work being made. We usually aim for 1750g per litre. If lower than 1700g per litre, add more powder. If litre weight is correct and the slip is still thick, adjust by adding the remaining Dispex drop by drop.
- 8. Sieve the slip through an 80-mesh sieve and seal in an airtight plastic container.
- 9. Age the slip for 24 hours.
- 10. Always re-mix the slip before casting, taking care not to introduce air into the slip.

For density, the desired fluidity and thixotropy are quite personal and will be governed by the work being made.

As the slip ages some thickening may be apparent. The first step would be to check the density (litre weight). If within an acceptable range, add Dispex. It the density is too high, add water. Lowering the density with the addition of more water can restore fluidity. Dispex can also be added in small amounts to restore fluidity, but take care, as too much Dispex will cause slip to thicken.

NOTE: Recycling scrap is not recommended.

