

# Mixing Guide

## Lumina & Mid Fire Lumina

### *Porcelain Casting Slip*

#### 25kg Bag Recommended Mixing Instructions

#### Tools/Ingredients

- 25kg Lumina/Mid Fire Lumina
- 10kg Clean Water, equivalent 10lt
- 40gms Sodium Silicate N42 grade
- 40-60gms Dispex N40 grade (50gms recommended)\*
- Mechanical Mixer
- Accurate Scales

#### Method

1. Accurately measure 10kg of clean water into mixing tank.
2. Add 40gms of Sodium Silicate N42 to water. (Make sure all sodium silicate is mixed into the water and none is left in the cup or jug)
3. Add one third to half of the powder to the water and allow to soak in (slake) 10 minutes.
4. Start mixing the slip using a mechanical mixer.
5. The slip will appear thick, mix 50gms\* of Dispex N40 with 200ml of water and add while mixing. **Be careful to use the minimal amount needed to make the slip fluid.** Not all 50gms has to be used.
6. Add the balance of the powder and mix for one hour or more until homogenous.
7. Check the density (litre weight), it should be under 1750gms per litre. If higher add water. Desirable density is subjective and will vary according to the work being made. The slip functions quite happily over a range of densities, we usually aim for 1750gms per litre. If lower than 1700gms per litre, add more powder.
8. Sieve the slip through an 80-mesh sieve and store in airtight plastic container. Age for 24 hours prior to use.
9. Re-mix slip again, for 5 minutes before using. Taking care not to introduce any air.

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 then add dispex. If the density is too high add water. Lowering the density with the addition of more water can restore fluidity. Or dispex can also be added in small amounts to restore fluidity. (Take care, dispex overdose will cause slip to thicken)

