

J Cast

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Porcelaneous Casting Slip

25kg Bag Recommended Mixing Instructions

Tools/Ingredients

- 25kg J Cast
- 10kg Clean Water, equivalent 10lt
- 38gms Sodium Silicate N42 grade
- Mechanical Mixer
- Accurate Scales
- 75gms Dispex N40 grade

Method

1. Accurately measure 10kg of clean water into mixing tank.
2. Add 38gms 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 75gms of Dispex N40 with 200ml of water and add while mixing. The slip should become quite fluid.
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 1800gms 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 1770gms 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.

NOTE: Recycling scrap is not recommended. J Cast can tolerate more than the recommended dispex, as with 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 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)

