



KC621

# J-Cast

Casting Powder

Bisque cone 06 / Glaze cone 10

## MIXING INSTRUCTIONS

### TOOLS/INGREDIENTS

- 25kg J-cast
- 20L bucket with lid (clean)
- Mechanical mixer
- 10kg clean water
- Accurate scales
- 20g Sodium Silicate N42 grade\*
- 15g to 20g 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 20g 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. Start by adding 15g of Dispex. Keep 5g of the total 20g aside for fine-tuning the slip as per step 9. The slip should become quite fluid. Maximum Dispex recommended is 20g, one may use less than this amount.
6. Slowly add the remainder of the powder, and mix for one hour or more until homogenous.
7. Check the litre weight – it should be under 1800g per litre. If it is 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 aim for 1770g per litre. If lower than 1700g per litre, add more powder.
8. Age the slip for 24 hours.
9. After 24 hours, stir the slip thoroughly with a mixer for 5-10 minutes, ensuring there are no lumps on the sides of the bucket. If fine-tuning is required, add the remaining Dispex drop by drop until the desired fluidity is achieved. Dispex additions are a guide only and one may not require the full 20g.
10. Sieve the slip through an 80-mesh sieve and seal in an airtight plastic container.
11. Always re-mix the slip before casting, taking care not to introduce air into the slip.

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. If 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.

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