## **TOOLS/INGREDIENTS**

- · 25kg Polar White casting powder
- · 20L bucket with lid (clean)
- · Mechanical mixer
- · 11kg clean water

- Accurate scales
- 70g Sodium Silicate N42 grade\*
- · 80g to 120g Dispex N40 grade\*
- · 2 clean plastic cups to weigh the deflocculant

## **METHOD**

- 1. Accurately measure 11kg of clean water into mixing tank/bucket.
- 2. Measure out the 70g (50ml) of Sodium Silicate and dilute 1:1 with warm water.
- 3. Measure Dispex and dilute 1:1 with warm water. We recommend 80g (63ml) of Dispex as a starting point.
- 4. Turn on mixer and add diluted Sodium Silicate to the water.
- 5. With the mixer running, gradually add half the clay powder.
- 6. As slip thickens, add the diluted Dispex and remaining powder a little at a time, so as to keep the slip fluid. You do not have to add all the Dispex if not required.
- 7. Check the litre weight. It should be 1725g/litre. If it is more than 1725g/litre, add water. If it is less than 1725g/litre add more dry powder. If litre weight is correct and the slip is still thick, adjust by adding the remaining Dispex drop by drop.
- 8. Mix slip continuously for 2 hours.
- 9. Age slip for 24 hours.
- 10. Sieve slip through an 80-mesh sieve. If you wish to produce quality greenware this step is essential.
- 11. Always thoroughly re-mix the slip before use. If necessary, adjust the fluidity with a little Dispex to obtain the desired pouring consistency.

NOTE ON TARGET WEIGHT: Different studios may use different litre weights ranging from 1700g/litre to 1750g/litre. This depends on personal preference, the size of the moulds, water quality, etc. For instance, small fine moulds may require a lighter litre weight than larger open moulds. We recommend a target litre weight of 1725g/litre.

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

NOTE: Recycling scrap is not recommended.

