

## Low-Fire Super Slip by Petro Mold Company

As you may be aware, there has been a severe crisis in the ceramic industry due to the nation-wide talc shortage. The newly imported talc does NOT perform the same as the old talc from Texas. Slip made with this talc tends to gel and turn to pudding when left unmixed, even for a very short time. Meanwhile, other slip manufacturers that are still using talc from Montana or have gone talc-free, have had similar issues with consistency and a yellowish or off-white color when bisque fired.

Petro Mold Company has been dealing with these issues in our own casting department, so we've decided to develop our own slip formula to get quality and performance issues back under control. After nearly 6 months of development, our Super Slip was born. Since we use slip in our own production pottery and bisque production, we have very specific qualities that we look for in a slip and we think you will appreciate them as well. During the development of Super Slip, these are the things that were designed into the recipe:

1. Relaxed, yet fast casting time. From the time the mold gets filled until it gets drained is typically 20 to 40 minutes, depending on mold size, age, and desired wall thickness.
2. Trimming out the spare on most molds can be done in 15 to 30 minutes from draining.
3. Demolding of the piece can usually be done in 1 ½ hours to 2 hours from the fill time. This means that a single mold can cycle an incredible 4 times in an 8-hour casting day.
4. The demolding window is huge. If you can't get to your casting in 2 hours, don't worry. They can be left in for many hours or even overnight without cracking in most mold designs.
5. Leather hard clay, after just 1 ½ to 2 hours in the mold, is very stable and can be handled with care without warping or distortion in most cases.
6. If the Super Slip is kept at a specific gravity of 1.75, and a viscosity in the low 20's, it will not gel like other slips. Mixing tanks and hoses flow easily each day. Like all slips, however, our slip will thicken after extended periods of inactivity, but it easily and quickly goes back into slurry with agitation.
7. Air-drying time is normal and typical for any slip.
8. Cleaning the seams is VERY easy and smooth, either wet or dry. During the cleaning process, our slip makes larger dry particulates, meaning far less airborne dust. However, you should continue to use good cleaning practices for a safe work environment.
9. Super Slip fires WHITE and will not require a white underglaze, saving you time and money. Kiln firing your greenware is typical and should bisque fire to cone ^04 (1945 degrees F) and glaze fire to cone ^06 (1826 F). Shrinkage is minimal at just 5 ½%.
10. Our Super Slip has glaze tested positively with virtually every glaze manufacturer's clear glaze. However, because there are so many glazes out there, we cannot test every glaze. You should do small scale testing if you are unsure of your particular glaze compatibility.
11. Since our slip won't saturate your molds as easily and you can demold castings quickly, your molds should last significantly longer, saving the expense of frequent mold replacement.

To achieve all these characteristics in a high performance, premium slip, we are not able to make this inexpensively. There are over 10 ingredients, precisely weighed and balanced, making this the best earthenware slip we have ever used. Even though it may be more expensive, the time savings for you and your employees, the increased daily production, extended mold life, and the quality of your castings, far outweighs the cost of the slip.

"I would much rather explain the price, than apologize for the quality..." – Robert Petro