

dōp

– dropout paste

What is it?

Dropout Paste is a proprietary mixture of dry materials that, when mixed with water, creates a paste that can be applied to the surface of a dropout ring/mold. When applied correctly it hardens quickly into a thin, textured, gritty coating that reliably helps to hold the glass blank in place during the dropout process.

History

If you have a bit of experience with dropouts, especially larger diameter dropouts, we're willing to bet that every once in a while, at some point, for some reason the outside edge of your glass blank began sliding inwards, coming precariously close to the edge of the opening in the mold. And if you were really unlucky, the glass even fell through the mold resulting in something awful.

At OnGrade Studio we've tried many different things over the years to understand and ultimately prevent this and are proud to offer our best answer: A small bag of DÖP. (pronounced: Dope)

Using dōp

View the dōp Application Demonstration Video: <https://www.nathansandberg.com/DOP>

Wear an N95 dust mask/respirator when working with powders that may become airborne.

Dropout Paste may dry out or stain your hands. You could wear gloves...but then again you shouldn't really have it all over yourself if you are just mixing it in a cup!

1. Shake or stir to mix dry dōp in its package.
2. Place 2 T (Tbsp) of dōp in a cup
3. Add 1 T + ½ t (tsp) of lukewarm water
4. Mix to form a thin, gritty paste. The mix should turn grey, purple upon mixing.
5. Using a 1" chip brush, or other small, coarse bristled brush, apply quick, thin brush strokes starting from the inside edge of the opening and radiating to the outside edge of the mold. The idea is to put down a thin, very textured layer, while leaving no area of the mold exposed.
6. As long as the mold is covered, the dōp is thick enough. 1/16" thickness or less is ideal. After coating with dōp you should not see any exposed areas of the FLAT portion of the dropout ring.
7. We're after texture here. If it looks smooth, run the brush back over a recently covered area to create ridges. Be gentle with the brush though, too much force/pressure could remove the paste instead of simply texturizing it.
8. The inside edge of the dropout ring should not be coated and should be wiped clean of any dōp before it sets.
9. Coat the inside edge of the dropout ring with standard Shelf Primer (we like Bullseye's)

10. There is no need to dry the mold + dōp + primer. It can be fired (with glass on top) immediately, or at a later date/time.

Notes:

Some Flatop Rings are White, and some are Beige /Tan.

Is your mold white? (Smaller molds, usually under 12") This material sucks up the moisture from dōp very quickly which can make coating the mold cumbersome. Spritzing the dry, virgin mold with water a few times JUST before applying the dōp will slow down the absorption and/or drying of the paste as you apply it. I've even dunked a larger mold in a bucket of water for 5sec before applying the dōp. No matter how it happens, getting a bit of moisture into the mold prior to applying the dōp makes the process a bit more efficient. I hope I'm making sense here!

If applied thinly, the coating should stay put for multiple firings.
We've consistently gotten four+ firings from a thin coating of dōp.

Protect the textured layer between firings.

Should any little spots chip or peel off you can simply patch the naked spots with a few drops/dabs of shelf primer.

Eventually it'll be necessary to recoat. Simply scrape and/or sand the mold with a green scrubby or other method of dry sanding. Reapply dōp + primer.

Applying DōP to old/previously used molds:

At OnGrade we have used DōP on all of our custom molds (available at nathansandberg.com/generalstore) since we started making them. At some point we also sanded all of our commercial (Bullseye) molds clean of old shelf primer and recoated with dōp.

If you have a favourite drop out ring that has previously been coated with slippery Shelf Primer, simply sand off the primer with a dry, green scrubby/Scotch Brite pad. When the bare mold is exposed, mix dōp and apply according to the instructions above.

Applying primer on top of dōp is not necessary.

