



Priming Colour de Verre Molds Using ZYP Spray

ZYP BN Lubricant Aerosol (formerly MR-97) is a boron nitride (“BN”) spray. When applied to Colour de Verre molds, the results are superior castings, virtually no spurs or sharp edges, and a beautiful, shiny surface. Application is as easy as applying a cooking spray. So what is the hitch? This sounds just too good to be true.

The biggest considerations are:

- Application requires a bit of finesse. ZYP spray contains an ultra-fine powder. One must make sure that the entire surface is thinly, but completely covered.
- Once you start using a BN spray on a mold, you can’t go back. The spray seals the mold and

traditional primers won’t be absorbed evenly.

- We tested ZYP in firings up to 1440°F. We noted at higher temperatures, ZYP worked best with transparent glasses. At these higher temperatures, a cloudiness appeared on opal glasses. We believe this surface cloudiness or veiling might be mitigated by reducing temperatures and, instead, increasing hold times. This cloudiness can also be reduced by mixing opals with at least 50% clear or transparent frits.
- Like all fine particle products, it is important to wear a dust mask. Also, because of the propellants, it is important to apply it and remove it outside or in a well-ventilated space.

Not all BNs are Equal

After testing many boron nitride sprays, we discovered a clear winner: ZYP. This product gave us consistent, superior results.

ZYP is a touch more expensive than some of the other BN products. However it only takes one broken mold or stuck casting to persuade you not to use a lesser quality product. ZYP is available at our website, colourdeverre.com; ZYP.com; and art glass distributors and stores.

Applying ZYP

If your mold has been used before, completely remove all the old Pri-

mo Primer from the mold with a stiff nylon kitchen brush and/or tooth brush. Read the instructions on the ZYP can. The Material Safety Data Sheet can be downloaded from ZYP product detail page in our online store. *Note: Make sure to shake the can thoroughly for at least 60 seconds after you start hearing the ball freely rattling inside the can.*

The first time ZYP is used on a mold, it is necessary to apply two coats of the product. Hold the can 10 to 12 inches from the mold. *Hold both the can and the mold upright.* For smaller, shallow molds, apply the first, light coat using a two to three-second burst of spray in a sweeping pattern across all the mold’s cavities. For larger molds – our box molds for example – use a three to five-second blast making sure to cover the deepest recesses. *Do not saturate the surface.* If you notice the surface looking wet, immediately stop spraying. Allow the mold dry and then lightly respray the wet area.

Set the mold aside for five minutes so it can dry. Once dry, reapply a second coat using another two to three-second (three to five-second for larger molds) burst of spray. Let the mold dry for ten to fifteen minutes. The mold is ready to fill.

Note: If a can of ZYP is less than half full it sometimes doesn’t spray product as heavily. In this case, increase spray time by a second or two.

Filling the Molds

The ZYP surface is delicate and care must be taken not to scratch away the primer as you fill the mold. We recommend using powder, fine, and medium frit as opposed to larger meshes or broken sheet glass. The larger frit can scratch the surface and create potential sticking problems.

Cleaning Your Castings

It is important to remove any residual boron nitride from your glass casting otherwise your cast components will not tack fuse properly in your next firing.

Wash the casting in warm water with a little dish washing liquid and a mild, abrasive cleansing powder like Bon Ami®. Rinse thoroughly and dry.

Subsequent Firings

The ZYP becomes powdery after firing and it is best to remove it so that it doesn't mix with frit on the next firing. We strongly suggest doing this outside or in a well ventilated area wearing a dust mask. Use a stiff, nylon kitchen brush and/or toothbrush – the same tools used to remove Primo Primer – to remove the BN powder. The cleaned surface will look burnished and shiny. Reapply *one* thin coat of ZYP as before. The surface should now look matte. If any areas are still shinny, touch up with a little more spray. Let the mold dry for ten to fifteen minutes before refilling.

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