

POLAR FUSE

Helpful Hints

Please read all POLAR FUSE instructions prior to reading these Helpful Hints!

The Do's and Don'ts of POLAR FUSE

- DO - When mixing, use distilled or filtered water if possible.
- DON'T - Pour the excess water down the drain! It contains glass particles; instead use a few paper towels to sop up the water before throwing it in the trash.
- DO – Instructions indicate to freeze 15 – 30 minutes, but you may need up to 1 hour to freeze, pieces should pop out of the molds like ice cubes when they are perfectly frozen.
- DON'T - Freeze overnight - it can drain moisture from the piece and it will crumble when you remove it.
- DO - Start over if you notice a crack or your piece falls apart when removing it from the mold (this can happen with under-freezing or wicking away too much moisture), just remix with a little bit of water and repeat the POLAR FUSE process.
- DON'T - Attempt to fuse an unfired POLAR FUSE piece to a piece of sheet glass. During the POLAR FUSE process the moisture from the molded glass piece is wicked away by fiber paper and evaporates while the glass is fusing. Placing a POLAR FUSE piece on a solid piece of glass will prevent moisture wicking from the fiber paper which may cause the glass to shatter.
- DO - Fuse a pre-fired POLAR FUSE piece to sheet glass, just follow the same schedule you would when firing the POLAR FUSE piece to get a nice tack fuse.
- DON'T - Limit yourself to using Polar Fuse™ Molds, any silicone or rubber mold will work just as well.
- DO - Allow one hour between each fusing so the kiln can cool down - a preheated kiln will lead to possible over-fusing.
- DON'T - Touch glass shape until it has thoroughly cooled down, 30 minutes. Hot glass looks just like cool glass, so be careful.

More Helpful POLAR FUSE Hints

- If you see any color changes on the piece after the first round of firing, reduce to 15 seconds, if not fire at 30 second intervals.
- Your goal is to reach a tack fuse-like state. Unlike standard fusing, you will want to see a shiny surface that is slightly glowing.
- Your kiln paper may turn black or brown, this is okay - this is just an indication that the sugars are burning out of the paper - it should disappear when the piece is fully fused.
- A good indication of a good fuse; the piece is lightly glowing where you can still see detail, if you lose any detail the piece has already over-fused and if the piece looks sandy or grainy, it is under fused - below is a guide to the glow color that should be expected.

POLAR FUSE Primary Colors	
Glass Color	Fusing Glow
Black	red to red-orange
White	white to cream
Clear	white to cream
Red	red to red orange
Blue	red to red orange
Yellow	orange

POLAR FUSE Fun Colors	
Glass Color	Fusing Glow
Purple	red to red-orange
Turquoise	white to cream
Amber	white to cream
Green	orange
Light Red	red to red orange
Gray	red to red orange

- The end piece will be about 30% smaller than the original - this is normal - it's all from the water evaporating and the glass powder fusing together.

As with all of Fuseworks™ products, please read and follow all **IMPORTANT SAFETY WARNINGS** listed in the Fuseworks™ Kit Instruction Manual before you begin.