

ProCast Mix Procedure

7, 14 and 28 Gram Package

Warnings:

Please read all documentation on my Website (www.quickburst.net). There is a wealth of useful information available on the product and its uses.

Read these directions first. Do not attempt to “Wing It”.

Do not smoke or mix while mixing this product, never use near heat or sparks.

Use in a well ventilated area.

Do not use spark producing tools.

Read all product warnings.

Use this material **ONLY** as directed by the manufacturer. The product is designed to light amateur rocket motors flown at “legal” launch events.

Dispose of any unused product in copious amounts of water.

Never add oxidizer to any dry compound, always wet the compound first.

When handling dry powders it’s always appropriate to use respiratory protection to avoid breathing dust. A good respirator is a must.

This procedure calls for Acetone, do not use any other solvent. Acetone is available at most Hardware or Home Improvement stores.

Procedure:

The kit comes to you in three parts as follows.

Part #1 is a white plastic jar labeled “ProCast 14, 28 or Mini Dip” containing Viton pellets.

Part #2 is a small re-sealable bag or glass jar labeled “Boron”. Open the pack carefully and be careful not to spill the contents, the Boron is very messy. Avoid creating dust, it will get everywhere and stain anything it touches.

Part #3 is a small re-sealable bag containing the oxidizer labeled KNO₃ (Potassium Nitrate) and a desiccant bag. Always add your oxidizers to wet compounds. Never add Oxidizer to a dry powder, this is asking for trouble.

Part #4 is a wooden stir stick. (AKA Popsicle Stick).

Step 1 - Open the small white jar (Part #1) and add acetone. Acetone is hygroscopic, use acetone that has been kept in a well sealed container. FYI ... Do not use your wife's fingernail polish

The acetone should just cover the Viton pellets by about ¼", you can always thin with acetone later, if needed.

Reseal and stir frequently. You must dissolve the Viton pellets with the acetone into a viscous liquid. This is your Binder. It will take about five hours to dissolve the Viton pellets. Set it out capped overnight if needed.

Step 2 - Once the Viton is dissolved pour the contents of the re-sealable bag or glass jar labeled Boron into the white jar containing the dissolved Viton. Handle the Boron carefully, anything it touches will stain.

Step 3 – Stir well, make sure the Boron is mixed with the Viton Binder well. The mix should be a uniform color. Add small amounts of acetone to thin if needed.

Step 4 – Open the last small re-sealable bag labeled, KNO₃ and pour it into the white plastic jar with the Viton and Boron labeled "ProCast or Mini Dip", discard the desiccant pack it is no longer needed. Stir well, make sure you have combined the three ingredients well. You should not have any lumps and the color should be uniform.

Now that you have created the compound, you are ready to dip your starters. Please read all documentation and be aware of the product's potential and its capabilities. Pay particular attention to the part that describes how much compound is needed for a particular motor. If you are using the "Mini Dip" to enhance OEM starters like Estes there is no need to remove the glob of whatever it is. This could damage the bridge wire making your starter useless. Dip it glob and all, it doesn't matter.

ProCast can also be cast into disk shaped pellets or any configuration imaginable. Use an acetone resistant plastic with ¼" OD and ¼" deep holes, size can vary with use. Fill the holes with ProCast and let dry overnight. Pop the pellets out the next morning and use as required. The pellets can be lit with an e-match. I have also tested hot wire ignition on dipped igniters including e-matches. and have had no problems. The coil was made from 36 AWG Nickel Chromium resistance wire. The material is very energetic and produces a lot of heat ... rapidly. Be sure to read and follow your starter suggested size as directed in the documentation outlined on my site.

By ordering this product you are stating that you are at least 18 years of age and will not use the product for any purpose outside of the manufacturer's direction. This product is designed to be used for Amateur Rocketry Motor Ignition Only.