## New and Improved QuickDip 14 or 28 gram kits

Made In Texas, by Texans

## NOTE: This sheet must accompany bottle at all times.

## Preparation:

The components are not flammable on their own, however once mixed the compound is very flammable. Do not use around open flame, do not smoke, and do not generate sparks.

Included in the package:

- 1. Instruction sheet, also found on my website here:
- 2. White polypropylene straight side re-sealable polypropylene jar containing the fuel mixture labeled as "QuickDip".
- 3. 2 Dram glass bottle labeled "Binder".
- 4. 2 dram glass bottle labeled "Top Coat" .Please note this, the Top Coat will need to be diluted; to use; add acetone to the top of the jars label then shake well.
- 5. Wooden stir sticks.
- 6. Small re-sealable plastic bag labeled "KCLO4", with a desiccant pack.

Here's how to mix it up.

## Note:

Do not smoke or use spark-producing tools to avoid accidental ignition. Your tools can be wooden, stainless steel, brass or any other non-Ferris metal. I prefer the wooden stirs and stainless steel. Acetone is available at most hardware or Home Improvement stores, be sure to read the label warnings on the use of acetone. Be sure to use 100% Acetone and no substitutes, also fingernail polish remover will not work.

- 1. Empty the bottle of binder into the jar. When empty fill the bottle about half full of fresh acetone, shake well and pour this into the white jar as well. This assures you have added all of the Binder
- 2. Now add 1 teaspoon of acetone to the 14 gram kit and the 28 gram kit will need 2, of clean fresh acetone. Stir well, you will get a viscous black/gray slurry that is one uniform color.
- 3. NOTE: Never add oxidizer to a dry mix, the possibility of accidental ignition would increase dramatically.
- 4. Open the zip lock bag of Oxidizer then carefully remove the desiccant pack and dispose of properly.
- 5. Next you will add the Oxidizer to the wet fuel mix. Pour all of it in and stir well. It will be thick and may require some acetone to thin, you can't add to much acetone. Were only trying to thin the mix enough to mix the components thoroughly. We will address dipping viscosity later. We want it wet enough to stir, the compound should not cling to the stir stick.
- 6. Stir well. The fuel and the oxidized do not dissolve in the acetone; they need to be suspended in the mix.
- 7. If you need to thicken the mix stir while blowing over the top of the jar to flash the acetone off. This will allow you to reach the desired viscosity. If you need to thin, add acetone in small amounts. Always stir well
- 8. I like to keep the dip about the consistency of latex paint. When the viscosity is right it will not drip off the stir stick. It will cling.
- 9. The proper viscosity is very hard to describe in text. What you're looking for is a mix that will cling to the Hot Wire Coil of your igniter assembly. You will size your starters according to your needs. Some motors will require a thin starter and some will require a much thicker starter.
- 10. Sometimes an igniter may require a single dip over a single strand of resistance wrapped wire. Thinner Starters may require a dip into the "Coating" fluid or a coat of fingernail polish to make them more robust; a dip in the coating will benefit all of your igniters.

- 11. A thicker igniter can be made by multiple dips or folding your hot wire coil over. I frequently use doubled coils or even triple folds.
- 12. Dip your hot wire assembly until you reach the desired length and OD. Let dry overnight.
- 13. If your mix dries out in storage you can re-constitute it by adding more acetone. Acetone is Hygroscopic, use fresh acetone tor acetone that has been kept well sealed for the best results. Use 100% Acetone only. FYI ..... Your wife's fingernail polish remover will not work.
- 14. Using Top Coat:

The first thing you need to do is dilute the product. Do this by adding fresh acetone up to the top of the bottles label, which is just below the bottles shoulder. Add the acetone then shake well. The product is now ready to use. After your starters are good and dry, Take the starter by the lead and dip it into the Top Coat Container. Submerge the business end then pull your starter back out. You have just added a protective coating to your igniter. Hang the starter upside down to dry overnight. You will find that the starter is much more robust and far less likely to crumble. It's a good idea to coat all of your starters. If you need more Top Coat just drop me an email. I sell it by the bottle for \$8.00, which includes shipping. I'll send you a Pay Pal invoice, you can provide payment using that.

Please note: When you purchase this or any other item from QuickBurst you are stating that you have read, understand and agree to The Manufacturers Intended Use as follows, The manufacturers intended use of QuickDip is for use in Model or Amateur rocket projects. Any use other than the manufacturers intended use is outside of the manufacturers intentioned use.

Making Motor Starters,

This is so simple that after you have done it a few times you will be an expert. Just follow the steps described below.

Step 1. (Shooter wire or other twin conductor)

Separate the two conductors. Cut one lead about  $\frac{1}{2}$  to  $\frac{5}{8}$ " below the other. Do not cut or damage the other lead while doing this.

Step 2

Strip about 1/4" insulation off each lead and bend the long lead out of the way.

Step 3

Secure one end of the nichrome wire with your thumbnail and wrap the nichrome around the exposed copper about three or four wraps. Now bend the remaining copper over and down, crimping the nichrome in place. Step 4

Wrap the nichrome barber pole style up the long lead over the insulation. Four wraps are plenty. Crimp the ends firmly cut excess nichrome.

Step 5

Now mix your QuickDip and dip away. The dip can be layered if needed. Try to keep coating between 1/16" and 1/8" for best results. If a thicker starter is required fold your coil down and against the lead wire then dip. Another great use is to paint the top portion of the upper grain in reloadable motors.

I prefer to use shooter wire or lampcord to make my igniters, it can also be done easily with 24 AWG Cat 5. I've found that 32 AWG nichrome 80 resistance wire works for any general purpose ground start igniter. Airstarts and Clusters will take a bit of research on your part, for these I typically us the 34 or the 36 AWG Nichrome 80

Always Bench Test, to be sure

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