

Mines

This is how to build a 1 3/4" mine. You can scale this up to 3" or even 4" but be careful after that - large bags of stars in mines tend to turn to lift instead of being nice - that results in burst tubes (big bada-bangs!). For 3" mines, use about 110 grams of stars and about 28 grams of 2FA BP (or equivalent).

There are many ways to make a mine - this is just one that has performed well (see the video at the bottom of the page). You can make one of these in a New York minute - an additional plus. Also, the paper bag with the flat bottom tends to focus the powder much better - the result is a stronger lift than some other ways. You can use perforated disks and sabots for your mines but small versions like this are harder to implement. In all, this is my favorite.

It takes longer to talk about this than it does to do it.

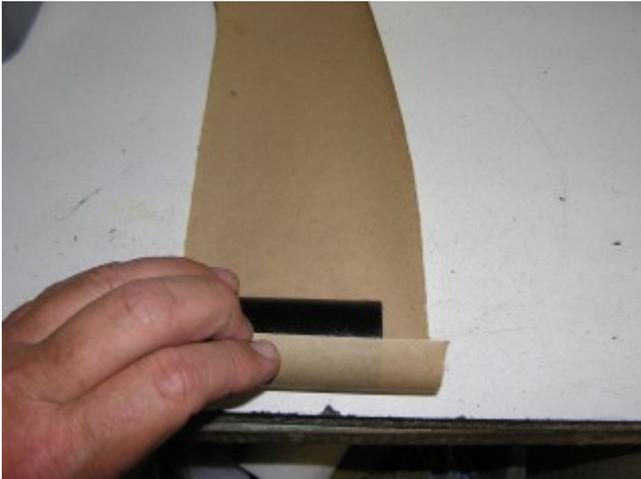


Here is a finished product alongside a festival ball.



Here is a homemade case former - it is just a 1 1/2" tube with a fiberboard plug with a hole in it (to stop from

pulling a vacuum when you slide the paper off)



Using a fairly thin paper (this is painter's masking paper), roll a tube - make it about three wraps



Tape it and leave a small overlap on the case former end



Use a fiber plug for the base. These were cut out with a hole saw - they don't have to be precise (and these aren't)



Insert the fiberboard plug into the tube



Fold it over and tape it tight. You can glue it if you wish but taping is usually good enough.



Get a sandwich baggy



Weigh out 40 grams of stars



Put the stars in the baggy



Trim the baggy and fuse it with fast



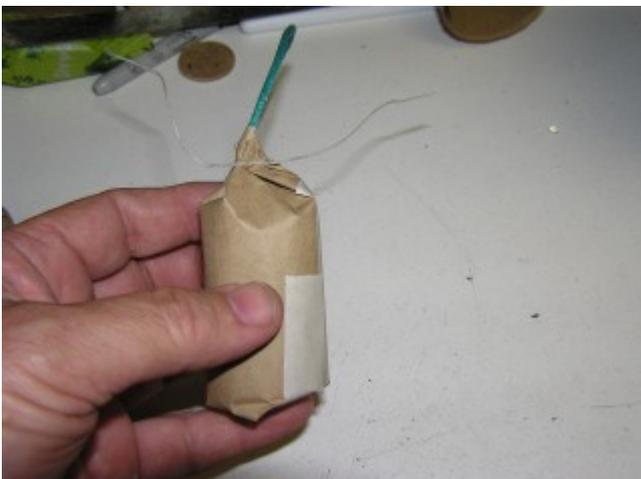
Visco, quick match, squibs, or whatever you can tolerate. You are lighting the stars first.

Put about 4-5 grams of 2FG or equivalent into the bottom of the case you made. Five grams will get the stars out of the tube very hard so make sure you have good launch tubes. A normal festival ball tube will work with four grams or so.



Put the star bag into the case. Note how the tape binds the baggy and fuse together - this stops the fuse from pulling out.

Looks like this



Tie with string (I like wax string from Wal-Mart)

Launch! Click on the above picture for movie. You can use a standard 1.4g mortar tube for the gun if you stay around 4 grams for the lift. After firing, check the tube for junk that is left behind and empty it out. The bag will probably still be in the tube.