

# Chapter 2: Pyrotechnic Supplies You'll Need for the Turbo Pyro Projects

Now that you've decided to tackle Turbo Pyro, here is a list of the special pyrotechnic supplies you'll need to make these projects. You can't find these supplies at Wal-Mart. And most of them are not available locally at all.

So, you will almost certainly have to order them from a reputable pyrotechnic supply company. You will probably find the most economic approach will be a complete kit containing all the supplies listed below from [www.Skylighter.com](http://www.Skylighter.com).

But wherever you get your supplies, make it your first order of business to order them right away. They can take one or two weeks to arrive, so you might want to order right now.

You'll also need some fairly common household supplies and tools. There's a complete list of those items in the next chapter.

The list below contains all the pyrotechnic chemicals, tools, and supplies used in the various projects in this book.

The total quantity you'll need of each item is shown. And there is a link to that product if you want to buy it from Skylighter.

Keep in mind that if you need all of the items below, it's more economical to buy them all together in the kit, than to purchase each one individually.

The price of the Turbo Pyro Kit is a fraction of what the individual items would cost if you bought them separately from anywhere.

## Pyro Tools & Supplies Needed for Turbo Pyro Projects

The following list of tools and supplies are provided in the Turbo Pyro Kit that you can buy from Skylighter. This is all of the special pyro supplies, tools, chemicals, fuse, tubes, etc. in the exact sizes shown in the project instructions that are needed to make all of the projects in this book.

### Digital Scale

The scale weighs up to 222 grams (about 8 ounces, 1/2 lb.), has 1/10 gram accuracy is Backlit LCD Display, and weighs in grams (g), ounces (oz), or penny weight (dwt). It also has a tare function. This scale comes with batteries already installed 3-1/2" x 2-38" x 5/8" thick. [Skylighter # TL5020](#). Quantity needed—1

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It is a good idea to keep a known weight in your shop to check the accuracy of your scale each time you use it. The batteries can get low, or the scale can start to fail, and the result will be inaccurate weighing. Five US quarters typically weigh 1.00 ounce (28.4 grams), and nickels weigh 5 grams each typically.

Keep a few quarters or nickels, of known weight, in a plastic baggie so they stay clean. Check the accuracy of your scale each time you use it. That simple precaution can prevent a lot of weighing mistakes.



### Checking Scale Accuracy

When you are weighing chemicals, place the mixing tub, into which you'll be putting your weighed chemicals, next to your scale.

Place an empty paper cup on your scale. Push the scale's "tare" button to set the scale to zero with the weighing cup on it.

Put the desired amount of an individual chemical in the cup on the scale, and then dump that chemical into your mixing tub.

Repeat that with each individual chemical, until all the individual chemicals have been weighed and are in your tub.

Now put another container, large enough to hold the weighed mixture, on your scale and "tare" the scale to zero again.

Pour your chemical mixture into the empty container on the scale and verify that the mixture weighs what your total batch was supposed to weigh.

That verifies that you have not forgotten a chemical, and you have weighed each individual component accurately.

You are now ready to proceed with the other steps in mixing your composition.



Note: A digital scale may continue to “tare” after the button has been pushed, and while small quantities of chemical are added to the cup. You can add a gram or two of chemical to the cup and the scale is still displaying 0.00. It is best when weighing very small quantities of chemicals, to tare the scale to zero with the cup on it, remove the cup and add a bit of the chemical to the cup while it is removed from the scale. Then put the cup holding the bit of chemical back on the scale and adjust the amount of chemical as necessary.

### Fuses

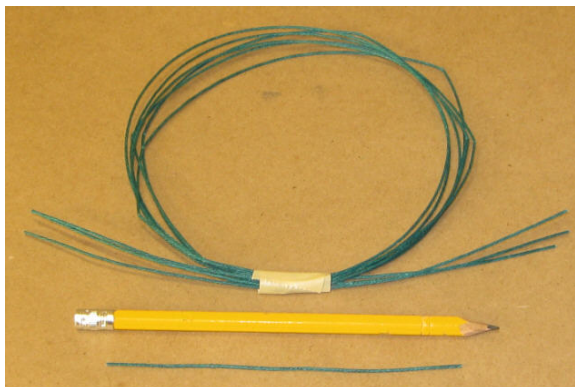
Chinese Visco ignition fuse, 3/32-inch diameter. Green fuse, burns at about 1.7 seconds per inch. [Skylighter #GN1005](#). Quantity needed—50 feet



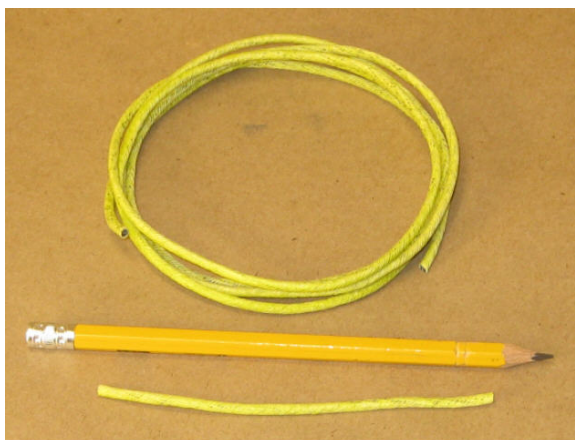
Thin Chinese Visco ignition fuse, 1mm (3/64-inch) diameter. Green fuse, burns at about 5 seconds per inch. [Skylighter #GN1010](#). Quantity needed—3 feet

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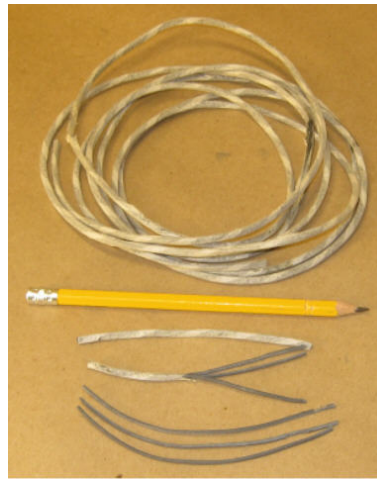
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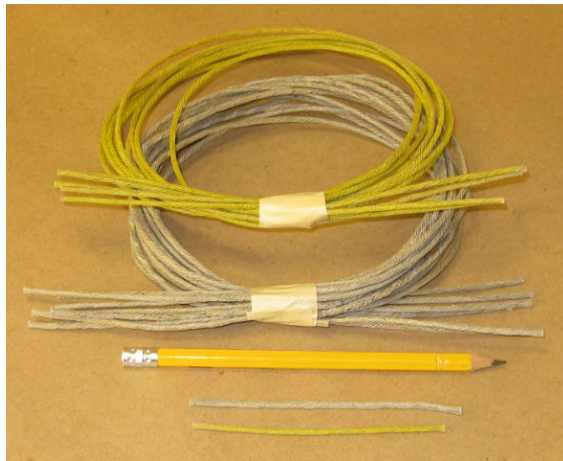
FAST BURNING Chinese Visco ignition fuse, yellow, 3/32-inch diameter. Burns at about  $\frac{1}{4}$  second per inch (4 inches per second). Colored yellow so you do not use it in place of other, slower burning fuses. [Skylighter #GN1100](#). Quantity needed—25 feet



Super-Fast Paper Fuse. Three thin strands of blackmatch, wrapped in tissue paper, 1/8-inch diameter paper fuse (1/16-inch diameter blackmatch strands). Paper-wrapped fuse burns at about 1 second per foot. [Skylighter #GN1205](#). Quantity needed—10 feet of paper-wrapped fuse (yields 30 feet of thin blackmatch)



Flying Fish Fuse—Various Colors and Effects with varying diameters and burns at about 1.75-2.0 seconds per inch. [Skylighter #'s GN1020 – GN1047](#). Quantity needed is 16 feet.



## Chemicals

- Potassium Nitrate (saltpeter), white crystals. [Skylighter #CH5302](#). Quantity needed—2 pounds
- Charcoal, airfloat. Extremely fine, grayish-black powder. [Skylighter #CH8068](#). Quantity needed—8 ounces
- Charcoal, 80 mesh. [Skylighter #CH8066](#). Quantity needed—4 ounces
- Sulfur, yellow powder. [Skylighter #CH8315](#). Quantity needed—6 ounces

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- Dextrin, light yellow powder. [Skylighter #CH8107](#). Quantity needed—2 ounces
- Clay, bentonite, very fine tan powder. [Skylighter #CH8078](#). Quantity needed—1 pound
- FerroTitanium, -60+100 mesh. 40:60 iron to titanium ratio. Gray metal alloy powder. [Skylighter #CH8113](#). Quantity needed—6 ounces

### Mortars

- Festival-Ball-Shell Mortar, 1 3/4 - 1 7/8-inch ID, fiberglass or HDPE plastic with plug. [Various Skylighter product numbers](#). Quantity needed—1
- 3/4-Inch ID Mortars. A cardboard tube and a plastic base. [Skylighter #TU2053](#) (tube) [#PL3001](#) (base). Quantity needed—10 sets



### Aerial Shell Casings

Plastic Shell Casing, 1 5/8-Inch OD, #5 Shell. Spherical, two halves, one with fuse hole for Visco fuse. [Skylighter #PL2030](#). Quantity needed—5 sets





### Paper Tubes

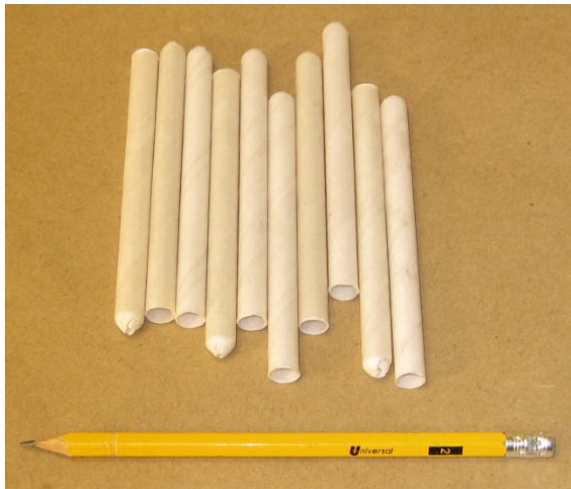
Paper tubes, 3/8-Inch ID, 3.5-Inch Long. 1/8-inch wall thickness, parallel wound tubes. [Skylighter #TU1008](#). Quantity needed—85



Paper tubes, 5/16-Inch ID, 4-Inch Long. 1/64-inch wall thickness, spiral wound lance tubes. [Skylighter # TU2020](#). Quantity needed—15

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### Tools

Combo-Tool set for 3/8-Inch Devices. Includes star pump sleeve, ramming base, 3 spindles, hollow ramming drift, solid drift, ram-through funnel, drill-guide, and drill bit. [Skylighter #TL1402](#). Quantity needed—1 set





You can order everything in the list above from [Skylighter.com](http://Skylighter.com).

Order the [Turbo Supplies Kit](#) containing everything.

Go [here to check out the Turbo Supplies Kit](#). The cost is 20-25% of what the items above would cost if you purchased them all individually.