

HOW TO MAKE NITROCELLULOSE

Pseudonyms and aliases: smokeless powder, guncotton, nitrocotton, nitrated cotton, etc. 1) Buy a couple of bags of 100% cotton balls and a box of baking soda (sodium bicarbonate) at your local drugstore. Buy a few fume masks, PVC rubber gloves, and a pair of goggles from your local builder's store, such as Home Depot. 2) Wear all safety equipment, ALWAYS! Using a measuring cup and a large jar—perhaps an apple juice jar—measure out some certain volume of 70% concentration nitric acid and pour it into the jar. Record this, and everything else which you do in your (home) laboratory. Use a notebook. Now measure out $5/3$ (five-thirds, or about 167%) this volume of concentrated sulfuric acid (95% concentrated or better). In

other words, your ratio of the volume of nitric to the volume of sulfuric is 3:5; for every 375 ml nitric, measure out 625 ml sulfuric; for every 3 cups nitric, measure out 5 cups sulfuric. In the future, I will not be as detailed about quantities. 3) Slowly add the sulfuric in short intervals, stirring occasionally. Since concentrated sulfuric acid absorbs the excess water in the 70% nitric acid solution, a great deal of heat is given off. If the sulfuric were added too quickly, the sharp increase in temperature would cause the jar to shatter. Once all acid is mixed, you must clearly label the jar—in fact, clearly label EVERYTHING you mix or make—and allow the acid solution to cool to room temperature which may take a few hours. If you place this stuff in your refrigerator, the fact that the jar is hot on the inside and cold on the outside could cause it to shatter. If it shatters, you've got real problems. Kiss your floors good-bye. As a matter of fact, you must clean up any leaks at all, including the slightest drop. This is nasty stuff. It is a powerful acid (solution) and nitrator. If you get it on your hands, you'll wish that it had been only nitric acid... get the picture? 4) Now you will need a scale or balance. For every 18 grams of this acid solution, you will be able to effectively nitrate at least 1 gram of cotton. I don't care what units you use (grams, ounces, whatever) so long as the mass ratio of acid solution to cotton is about 18:1. Keep in mind that mass ratio is largely different from volume ratio; reversing the two could be disastrous. 5) Measure out the correct mass of cotton. To the jar add half of this amount. Replace the cap or lid (securely) and shake the bottle vigorously in spurts over a period of twenty minutes. Begin boiling a water ("aqueous") solution of sodium bicarbonate. (In other words, add a tablespoon of Arm & Hammer to a pot of water on the stove.) 6) Place a steel or plastic funnel on top of another (smaller) glass jar; place a steel strainer or sieve on top of this. Thus, when you remove the contents of your nitrating jar and add them to the strainer, the acid solution will drain out of it into the funnel, which will flow it into the jar. Get the picture? If you are wearing your gloves like you should be doing, you can press down on the cotton so that the acid is drained and funneled into the jar more quickly. Pour this reusable acid back into the first

larger jar, and then run the strainer (filled with cotton) under running hot water to remove most of the excess acid. 7) Place the cotton into the boiling sodium bicarbonate solution and leave it there, boiling, for five or ten minutes. Remove the cotton with the strainer and run it once more under hot tap water. At this point, hand dry it with clean towels and then allow to dry either in the sun or in a warm, dry place. 8) In the jar you should have about as much acid as you started with, although a small amount was washed down the sink when you washed the cotton. Therefore, you can now add the other half of the cotton to the "cycle" acid solution in the jar. Repeat steps #5 through #7, and then dispose of the acid by dousing with water. 9) When you are done, wash all equipment thoroughly, especially those which are kitchen utensils, although I don't recommend using them for your kitchen anymore. Make sure all chemicals are in their places and label them all. No longer in this book will I continue to mention these important though obvious details (cleanliness, safety, et cetera).

This stuff may not look much like powder, but you have just made a very pure and powerful smokeless powder. When it is completely dry, upon exposure to high temperatures or the slightest flame, it will violently decompose into "thin air." I have used a hair dryer to dry it before, but once, the temperature got too high and it ignited in my face! I was in luck for two reasons: I was wearing eye protection (goggles); deflagrating explosives are not very destructive when not contained. True, they get hot and can burn you, but a small amount of smokeless powder which is ignited in open air with a match is harmless.

Nitrocellulose—otherwise known in this book by one of its "pseudonyms"—looks and feels like cotton. It is an explosive which, upon ignition, decomposes into gases with very high temperatures and a very large volume; it decomposes with a beautiful, pure, yellow flame. It is an excellent gun propellant. Keep in mind, though, that I am right now only introducing you to the possibility of using it as a gun propellant. So as not to interrupt the continuity of this supplement, I have decided to wait until much later to give you a complete step-by-step guide on how to build your own lethal projectile weapons—otherwise

known as guns. It will be found, therefore, at the end of the next chapter. Your knowing how to effectively use guncotton will aid you in the "chemical side" of nuclear bombs. In conclusion, I don't believe that it's illegal to nitrate cotton in your kitchen, but it is highly illegal to use this guncotton in a shrapnel explosive (pipe bomb) or as an igniter (in a blasting cap) or as a gun propellant or anything which the government considers "abnormal." Don't get caught!

You will use guncotton as your flash charge in the electric blasting cap, if you so choose. You may also use a conventional nonelectric blasting cap— using a fuse— but how low can you go? Fuses run about \$3 per 10 feet nowadays, which is a little on the expensive side, but most fireworks stores carry them. However, I recommend that you ignite the guncotton electrically, stretching the electrical leads as far from the explosive as you please. That's usually how Wile E. Coyote does his nasty work. Simply wrap a piece of medium- or fine-grade steel wool between the wire's two leads and place the wool in contact with the guncotton flash charge. When ready, get far away and place a 9-volt potential difference between the wires. Another method is simply to replace the steel wool and guncotton combination with a model rocket igniter which is made to create very high temperatures. The igniters run about \$2.50 for six, and can be bought from your local hobby store or from Estes Industries.

The next chapter will be a continuation of this supplement, "How to build a chemical bomb." It will immediately indulge in everything you need to know about building your own chemical explosives, and it will even touch on the inadequacy of airport scanning systems, which search for terrorist guns and et cetera. You see, the next chapter will show you how to build homemade lethal projectile weapons (guns) without ever getting caught. This will put you in the mood for realizing the power of the nuclear bomb. I hope you enjoy it.