ANNM

This file wasn't made for people who want to blow up other people, animals or private property.

Use your brain before attemting to follow any information given. Explosives are illegal in most countries.

You will need ammonium nitrate (NH4NO3) and nitromethane (CH3NO2). Optional are metal dusts (Al, Mg, Zn, Si) and methanol (CH3OH). For the improvised blasting cap you'll need acetoneperoxide or HMTD - other primary explosive will work, too. Because of the easy acetoneperoxide production, it'll be used in this project.

The ammonium nitrate has to be dried in an oven. Procedures therefor are given in US Patent No. 4,093,478 by Gerald.L. Hurst. The patent provides varios methods for the ammonium nitrate preperation, it's basically wetting the AN and then evaporating the water resulting in reduced density and increased "oil retention" of the ammonium nitrate. The density should be around 0,6 g/ccm to 0,8 g/ccm for the dry AN. Store it in airtight containers, see picture.



Here you can see 1100g ammonium nitrate stored in a glas. It's wrapped with plastic foil to protect against moisture. So packed AN can be stored for weeks without getting useless.



Here's all that is needed: ammonium nitrate, nitromethane and metal dust (zinc).



Now add the metal dust to the AN. Do it quick to avoid that the ammonium nitrate picks up to much moisture from the air. The exact amount of metal dust isn't critical. A value between 3% and 10% should be OK.



In this case (1100g ammonium nitrate) 6% (66g) zinc dust is used. A grey powder should be the result. You shouldn't store the ammonium nitrate/metal dust mix, spontaneous decomposition can occur if moisture is present!

Now it's time for the nitromethane. If you search the web for the correct ratios to use you'll find very different opinions/data. Ragnar Benson suggests to use 70 - 80ml nitromethane for 430g ammonium nitrate, though i'm not sure if he really uses 430g. He measures out 250ml (!) ammonium nitrate prills, assuming the density is about 1.725 g/ccm. That's pretty stupid. The density of 1,7 g/ccm is the crystal density. Prills are never that dense. One can assume a density of 0,8 g/ccm to 1,0 g/ccm for commercial prills. I don't understand Ragnar, he publishes books about explosives and has no access to a scale? Can't believe it...
But the ratios are ~OK.

In US Pat. No. 4,093,478 a mix of 1000g AN, 185g NM and 84g methanol is referred to as one of the most powerful ANNM explosives.

If you use only nitromethane, take something around 250g (220ml) for 1000g ammonium nitrate.

When adding the nitromethane it would be the best to pour it onto the ammonium nitrate in the blasting container without stirring etc. It'll sensitize better if not disturbed. But i observed that not all AN may be wetted with the nitromethane, so a little bit of stirring is OK. Seal airtight as soon as possible.

The ANNM explosive is now ready to use. All you need to detonate it, is a blasting cap. You'll be shown how to manufacture one now.



First you need acetoneperoxide or HMTD. I assume you know how to produce some, but i included my method here. The pic shows the yield of 40ml acetone & 40ml 30% H_2O_2 .

Acetoneperoxide:

Equal amounts of acetone and 30% hydrogen peroxide are mixed in a glassbeaker and cooled to below 10 °C (ice bath, fridge etc.). For 100ml acetone/ hydrogen peroxide mix ca. 30ml 37% HCl is used. Add the acid in little portions over a period of ca. 20 minutes with occasional stirring. If you don't use an ice bath, put the beaker in the fridge to cool between the acid additions. After all the acid is added put the glass back in the fridge. Now it depends on you how patient you are. You could filter the whole shit after 30-60 minutes getting acceptable yields. Waiting for 6-8 hours will reward you with a much grater yield.

(You can wait even longer, but with 6-8 hours you've got most of the AP and the crystals are still like flour. Waiting for longer will result in larger AP crystals that are more sensitive!)

To filter add 150ml distilled water to the AP (should be a thick, white slurry) to dilute the acid and make the shit pourable for filtering. I use a normal paper- coffeefilter without any problems. Put the slurry on the filter and wash with distilled water until pH is nearly neutral. Now spread the AP on flat surface to dry. I prefer putting it on a layer newspaper, covered with some tissue. This speeds up the drying process considerably.

Note: Other peolpe may use different ratios & procedures - this works fine for me. (my fridge is – 18 °C)

HMTD:

14g powdered hexamine fuel tablets (hexamethylentetramine) are stirred in 45g (39.8ml) 30% hydrogen peroxide. 21g of powdered citric acid is added to this mixture and the beaker is put in the refrigerator (+ 3 °C).

After 24 – 48 hours the HMTD cake is diluted with the same amount distilled water, washed neutral in paper- coffeefilter with distilled water. The last wash is made with denatured ethanol to speed up the drying process.

Once you have dry AP (acetoneperoxide) or HMTD, you need a suitable container. Here a strong walled glasstube is used, 100mm x 10mm (outer diameter) 8mm inner diameter. It's carefully filled a few mm high with AP. Then the AP is pressed down with a plastic rod. This is repeated until the tube contains ca. 1g AP.



The tube is filled with ca. 1g acetoneperoxide. Be careful not to use a too close fitting rod to press the AP – the friction could cause an accidental detonation.

After filling it, remove all remaining AP from the walls of the tube.



A little bit blackpowder is put on top of the AP. To hold the fuse in place, a piece of paper is rolled to a tube and inserted in the glastube.



This is the finished detonator. Securing the fuse with a bit of adhesive tape might be a good idea. Insert full lenght into explosive, to ensure detonation.