

Ammonium nitrate based mixtures are mixtures of ammonium nitrate and some type of sensitizing compound. These can be either hard or easy to detonate, depending on what sensitizer is used. The main reason these explosives are used is just because its easy. You can bring tons of each chemical to the blasting site and just mix it there. Obviously, this list is just a few of the possible mixtures. You can make your own up and see what happens. It's pretty hard to screw up.

Amatol - Ammonium Nitrate/TNT

50:50 ratio of Ammonium nitrate/TNT.
Melt TNT on a water bath and slowly add ammonium nitrate to this.

AN Dynamite - Ammonium nitrate/nitric ester/flour

80:15:5 ratio of Ammonium nitrate/nitric ester/flour. I don't remember where I saw this, but it works well and is quite powerful. The nitric ester can be nitroglycerin, EGDN, or methyl nitrate.

Astrolite A - Ammonium nitrate/Hydrazine/Aluminum

55:30:15 ratio of Ammonium nitrate/anhydrous hydrazine/aluminum powder. In a well ventilated location (or outdoors), mix hydrazine and ammonium nitrate. This will bubble so add slowly and wait for the bubbling to subside each time. To this, add the aluminum and mix well. Can be detonated with an ordinary detonator, but a booster will improve performance.

Astrolite G - Ammonium nitrate/Hydrazine

2:1 ratio of ammonium nitrate/anhydrous hydrazine. I chose 2:1 because writing out 33.33333333333333 and the corresponding 66.66666666666666 would take too long - but I went ahead and did so anyway.

Similar to Astrolite A, just don't add any aluminum powder. You can simply weigh out 100g of ammonium nitrate and 50g anhydrous hydrazine, which will be in exact proportions.

ANAl - Ammonium Nitrate/Aluminum

95:5 ratio of ammonium nitrate/aluminum powder. Save the jokes. Very stable, can be set off with a detonator, but a booster improves detonation.

ANAP - Ammonium Nitrate/Acetone Peroxide

90:10 ratio of Ammonium Nitrate/Acetone peroxide. Take care in mixing it together. Crush the AN really fine in a dry room, then diaper in the acetone peroxide. Simple detonator will set this off

APAN - Acetone Peroxide/Ammonium Nitrate

50:50 ratio of Acetone peroxide/Ammonium Nitrate. Mix carefully - powder the AN up in a dry room and diaper in the acetone peroxide. This is fuse sensitive.

ANC - Ammonium Nitrate/Charcoal

85:15 ratio of ammonium nitrate/charcoal. Very hard to detonate, large booster is mandatory along with confinement. Make sure the AN is finely powdered.

ANFO - Ammonium Nitrate/Fuel Oil

(7 part AN 3 part FO)

94:6 ratio by weight of ammonium nitrate and kerosene. Also, a 50:50 mixture of gas and oil can be used in place of kerosene. To make, just powder the ammonium nitrate well and pour in fuel. Do not press this explosive because it will become hard to detonate. A normal detonator could set this off, but a booster improves performance.

ANHMTD - Ammonium Nitrate/HMTD

(Hexamethyletriperoxidediamine)

80:20 ratio by weight of ammonium nitrate and HMTD. Mix together carefully.

Standard detonator should be sufficient, but a booster would improve performance.

ANMNNC - Ammonium Nitrate/Mononitro Naphthalene/Carbon

85:10:5 ratio of Ammonium Nitrate/Mononitronaphthalene/carbon. Just mix thoroughly with a coffee grinder or food processor.

ANNM - Ammonium Nitrate/Nitromethane

80:20 ratio of Ammonium nitrate and Nitromethane (all parts by weight, not volume). For a better detonation, mix in 2 grams of sodium bisulfate for every 100grams of this mixture.

ANTNN - Ammonium Nitrate/Trinitronaphthalene

80:20 ratio of ammonium nitrate/trinitronaphthalene. Mix together carefully

(due to TNN). Can be initiated with a detonator, use a booster to improve performance.

ANTNX - Ammonium Nitrate/Trinitroxylene

75:25 ratio of ammonium nitrate/trinitroxylene. Mix together in whatever method suits your fancy (obviously be careful with the TNX). Can be detonated with a detonator, booster improves performance.

ANWax - Ammonium Nitrate/Paraffin Wax

94:6 ratio of ammonium nitrate/paraffin wax. It's best if you melt the paraffin wax, then add ammonium nitrate to it, followed by grinding in a coffee grinder or similar device. It should create a uniform, smooth mix. Another option would be dissolving

the wax in a non-polar solvent, pouring it over the ammonium nitrate and letting it evaporate - but that is a waste. Not vastly different from any of the other AN/fuel mixes, so only make it as a novelty.

ANXylene - Ammonium Nitrate/Xylene

94:6 ratio of ammonium nitrate/xylene by weight. The AN must be activated.

Sensitive to a simple detonator, but a booster will improve results. Typically requires around a 6" diameter charge to get full initiation, or light confinement.