

CHEMIST'S CORNER ARTICLE #1: EXPLOSIVES
BY ZAPHOD BEEBLEBROX/MPG

UPLOADED BY -THE TRIXTER-

THIS ARTICLE DEALS WITH THE INSTRUCTIONS FOR CREATING SOME DANGEROUS EXPLOSIVES. IF YOU INTEND TO MAKE ANY OF THESE EXPLOSIVES, DO SO IN SMALL AMOUNTS ONLY, AS THEY ARE ALL DANGEROUS AND COULD SERIOUSLY INJURE OR KILL YOU IF DONE IN LARGER AMOUNTS. IF YOU DON'T KNOW ANYTHING ABOUT CHEMISTRY, DON'T DO THESE EXPERIMENTS! I AM NOT JOKING IN GIVING THIS WARNING. UNLESS YOU HAVE A DEATH WISH, YOU SHOULDN'T TRY ANY OF THE FOLLOWING UNLESS YOU HAVE HAD PRIOR EXPERIENCE WITH CHEMICALS.

I AM NOT RESPONSIBLE FOR ANY INJURY OR DAMAGE CAUSED BY PEOPLE USING THIS INFORMATION. IT IS PROVIDED FOR USE BY PEOPLE KNOWLEDGABLE IN CHEMISTRY WHO ARE INTERESTED IN SUCH EXPERIMENTS AND CAN SAFELY HANDLE SUCH EXPERIMENTS.

=====

I. COMMON "WEAK" EXPLOSIVES.

A. GUNPOWDER:

75% POTASSIUM NITRATE
15% CHARCOAL
10% SULFUR

THE CHEMICALS SHOULD BE GROUND INTO A FINE POWDER (SEPERATELY!) WITH A MORTER & PESTLE. IF GUNPOWDER IS IGNITED IN THE OPEN, IT BURNS FIERCELY, BUT IF IN A CLOSED SPACE IT BUILDS UP PRESSURE FROM THE RELEASED GASES AND CAN EXPLODE THE CONTAINER. GUNPOWDER WORKS LIKE THIS: THE POTASSIUM NITRATE OXIDIZES THE CHARCOAL AND SULFUR, WHICH THEN BURN FIERCELY. CARBON DIOXIDE AND SULFUR DIOXIDE ARE THE GASES RELEASED.

B. AMMONAL:

AMMONAL IS A MIXTURE OF AMMONIUM NITRATE (A STRONG OXIDIZER) WITH ALUMINUM POWDER (THE 'FUEL' IN THIS CASE). I AM NOT SURE OF THE % COMPOSITION FOR AMMONAL, SO YOU MAY WANT TO EXPERIMENT A LITTLE USING SMALL AMOUNTS.

C. CHEMICALLY IGNITED EXPLOSIVES:

1. A MIXTURE OF 1 PART POTASSIUM CHLORATE TO 3 PARTS TABLE SUGAR (SUCROSE) BURNS FIERCELY AND BRIGHTLY (SIMILAR TO THE BURNING OF MAGNESIUM) WHEN 1 DROP OF CONCENTRATED SULFURIC ACID IS PLACED ON IT. WHAT OCCURS IS THIS: WHEN THE ACID IS ADDED IT REACTS WITH THE POTASSIUM CHLORATE TO FORM

HOMCHEM3.TXT

CHLORINE DIOXIDE, WHICH EXPLODES ON FORMATION, BURNING THE SUGAR AS WELL.

2. USING VARIOUS CHEMICALS, I HAVE DEVELOPED A MIXTURE THAT WORKS VERY WELL FOR IMITATING VOLCANIC ERUPTIONS. I HAVE GIVEN IT THE NAME 'MPG VOLCANITE' (TM).

HERE IT IS: POTASSIUM CHLORATE + POTASSIUM PERCHLORATE + AMMONIUM NITRATE + AMMONIUM DICHROMATE + POTASSIUM NITRATE + SUGAR + SULFUR + IRON FILINGS + CHARCOAL + ZINC DUST + SOME COLORING AGENT. (SCARLET= STRONTIUM NITRATE, PURPLE= IODINE CRYSTALS, YELLOW= SODIUM CHLORIDE, CRIMSON= CALCIUM CHLORIDE, ETC...). NOTE: THESE CHEMICALS GIVE OFF A HAZARDOUS GAS WHEN IGNITED. STAY OUT OF THE SMOKE.

3. SO, DO YOU THINK WATER PUTS OUT FIRES? IN THIS ONE, IT STARTS IT. MIXTURE: AMMONIUM NITRATE + AMMONIUM CHLORIDE + IODINE + ZINC DUST. WHEN A DROP OR TWO OF WATER IS ADDED, THE AMMONIUM NITRATE FORMS NITRIC ACID WHICH REACTS WITH THE ZINC TO PRODUCE HYDROGEN AND HEAT. THE HEAT VAPORIZES THE IODINE (GIVING OFF PURPLE SMOKE) AND THE AMMONIUM CHLORIDE (BECOMES PURPLE WHEN MIXED WITH IODINE VAPOR). IT ALSO MAY IGNITE THE HYDROGEN AND BEGIN BURNING.

AMMONIUM NITRATE: 8 GRAMS

AMMONIUM CHLORIDE: 1 GRAM

ZINC DUST: 8 GRAMS

IODINE CRYSTALS: 1 GRAM

4. POTASSIUM PERMANGANATE + GLYCERINE WHEN MIXED PRODUCES A PURPLE-COLORED FLAME IN 30 SECS-1 MIN. WORKS BEST IF THE POTASSIUM PERMANGANATE IS FINELY GROUND.

5. CALCIUM CARBIDE + WATER RELEASES ACETYLENE GAS (HIGHLY FLAMMABLE GAS USED IN BLOW TORCHES...)

II. THERMITE REACTION.

THE THERMITE REACTION IS USED IN WELDING, BECAUSE IT GENERATES MOLTEN IRON AND TEMPERATURES OF 3500 C (6000F+). IT USES ONE OF THE PREVIOUS REACTIONS THAT I TALKED ABOUT TO START IT!

STARTER=POTASSIUM CHLORATE + SUGAR

MAIN PT.= IRON (III) OXIDE + ALUMINUM POWDER (325 MESH OR FINER)

PUT THE POTASSIUM CHLORATE + SUGAR AROUND AND ON TOP OF THE MAIN PT. TO START THE REACTION, PLACE ONE DROP OF CONCENTRATED SULFURIC ACID ON TOP OF THE STARTER MIXTURE. STEP BACK! THE RATIOS ARE: 3 PARTS IRON(III) OXIDE TO 1 PART ALUMINUM POWDER TO 1 PART POTASSIUM CHLORATE TO 1 PART SUGAR.

WHEN YOU FIRST DO IT, TRY 3G:1G:1G:1G!

ALSO, THERE IS AN ALTERNATIVE STARTER FOR THE THERMITE REACTION. THE ALTERNATIVE IS POTASSIUM PERMANGANATE + GLYCERINE. AMOUNTS: 55G IRON(III) OXIDE, 15G ALUMINUM POWDER, 25G POTASSIUM PERMANGANATE, 6ML GLYCERINE.

III. NITROGEN-CONTAINING HIGH EXPLOSIVES.

A. MERCURY(II) FULMINATE

HOMCHEM3.TXT

TO PRODUCE MERCURY(II) FULMINATE, A VERY SENSITIVE SHOCK EXPLOSIVE, ONE MIGHT ASSUME THAT IT COULD BE FORMED BY ADDING FULMINIC ACID TO MERCURY. THIS IS SOMEWHAT DIFFICULT SINCE FULMINIC ACID IS VERY UNSTABLE AND CANNOT BE PURCHASED. I DID SOME RESEARCH AND FIGURED OUT A WAY TO MAKE IT WITHOUT FULMINIC ACID. YOU ADD 2 PARTS NITRIC ACID TO 2 PARTS ALCOHOL TO 1 PART MERCURY. THIS IS THEORETICAL (I HAVE NOT YET TRIED IT) SO PLEASE, IF YOU TRY THIS, DO IT IN VERY* SMALL AMOUNTS AND TELL ME THE RESULTS.

B. NITROGEN TRIIODIDE

NITROGEN TRIIODIDE IS A VERY POWERFUL AND VERY SHOCK SENSITIVE EXPLOSIVE. NEVER STORE IT AND BE CAREFUL WHEN YOU'RE AROUND IT- SOUND, AIR MOVEMENTS, AND OTHER TINY THINGS COULD SET IT OFF.

MATERIALS-

- 2-3G IODINE
- 15ML CONC. AMMONIA
- 8 SHEETS FILTER PAPER
- 50ML BEAKER
- FEATHER MOUNTED ON A TWO METER POLE
- EAR PLUGS
- TAPE
- SPATULA
- STIRRING ROD

ADD 2-3G IODINE TO 15ML AMMONIA IN THE 50ML BEAKER. STIR, LET STAND FOR 5 MINUTES.

DO THE FOLLOWING WITHIN 5 MINUTES!

RETAIN THE SOLID, DECANT THE LIQUID (POUR OFF THE LIQUID BUT KEEP THE BROWN SOLID...). SCAPE THE BROWN RESIDUE OF NITROGEN TRIIODIDE ONTO A STACK OF FOUR SHEETS OF FILTER PAPER. DIVIDE SOLID INTO FOUR PARTS, PUTTING EACH ON A SEPARATE SHEET OF DRY FILTER PAPER. TAPE IN POSITION, LEAVE TO DRY UNDISTURBED FOR AT LEAST 30 MINUTES (PREFERABLY LONGER). TO DETONATE, TOUCH WITH FEATHER. (WEAR EAR PLUGS WHEN DETONATING OR COVER EARS- IT IS VERY LOUD!)

C. CELLULOSE NITRATE (GUNCOTTON)

COMMONLY KNOWN AS SMOKELESS POWDER, NITROCELLULOSE IS EXACTLY THAT- IT DOES NOT GIVE OFF SMOKE WHEN IT BURNS.

MATERIALS-

- 70ML CONCENTRATED SULFURIC ACID
- 30ML CONCENTRATED NITRIC ACID
- 5G ABSORBENT COTTON
- 250ML 1M SODIUM BICARBONATE
- 250ML BEAKER
- ICE BATH
- TONGS
- PAPER TOWELS

HOMCHEM3.TXT

PLACE 250ML BEAKER IN THE ICE BATH, ADD 70ML SULFURIC ACID, 30 ML NITRIC ACID. DIVIDE COTTON INTO .7G PIECES. WITH TONGS, IMMERSE EACH PIECE IN THE ACID SOLUTION FOR 1 MINUTE. NEXT, RINSE EACH PIECE IN 3 SUCCESSIVE BATHS OF 500ML WATER. USE FRESH WATER FOR EACH PIECE. THEN IMMERSE IN 250ML 1M SODIUM BICARBONATE. IF IT BUBBLES, RINSE IN WATER ONCE MORE UNTIL NO BUBBLING OCCURS. SQUEEZE DRY AND SPREAD ON PAPER TOWELS TO DRY OVERNIGHT.

D. NITROGLYCERINE

NITROGLYCERINE IS A *VERY* DANGEROUS SHOCK SENSITIVE EXPLOSIVE. IT IS USED IN MAKING DYNAMITE, AMONG OTHER THINGS.

I AM NOT SURE AS TO THE PROPORTIONS AND AMOUNTS OF CHEMICALS TO BE USED, SO I SHALL USE ESTIMATES.

MATERIALS-

- 70ML CONC. SULFURIC ACID
- 30ML CONC. NITRIC ACID
- 10 ML GLYCERINE
- ICE BATH
- 150ML BEAKER

PUT THE 150ML BEAKER IN THE ICE BATH AND MAKE SURE THAT IT IS VERY COLD. SLOWLY ADD THE 70ML SULFURIC AND 30ML NITRIC ACIDS TO THE BEAKER, TRYING TO MAINTAIN A LOW TEMPERATURE. WHEN THE TEMPERATURE STARTS TO LEVEL OFF, ADD ABOUT 10ML GLYCERINE. IF IT TURNS BROWN OR LOOKS FUNNY, **RUN LIKE HELL**. WHEN NITROGLYCERINE TURNS BROWN, THAT MEANS IT'S READY TO EXPLODE... IF IT STAYS CLEAR AND ALL WORKS WELL, KEEP THE TEMPERATURE AS LOW AS YOU CAN AND LET IT SIT FOR A FEW HOURS. YOU THEN SHOULD HAVE SOME NITROGLYCERINE, PROBABLY MIXED WITH NITRIC AND SULFURIC ACIDS. WHEN YOU SET IT OFF, YOU MUST NOT BE NEARBY. NITROGLYCERINE CAN FILL 10,000 TIMES ITS ORIGINAL AREA WITH EXPANDING GASES. THIS MEANS THAT IF YOU HAVE 10ML'S OF NITROGLYCERINE IN THERE, IT WILL PRODUCE SOME 100,000ML'S OF GASES.

TO MAKE IT INTO DYNAMITE, THE NITROGLYCERINE MUST BE ABSORBED INTO SOMETHING LIKE WOOD PULP OR DIAMACEOUS EARTH (SPELLED SOMETHING LIKE THAT). REMEMBER: THIS STUFF IS EXTREMELY SENSITIVE TO CORRECT TEMPERATURES.

IV. OTHER STUFF

A. PEROXYACETONE

PEROXYACETONE IS EXTREMELY FLAMMABLE AND HAS BEEN REPORTED TO BE SHOCK SENSITIVE.

MATERIALS-

- 4ML ACETONE
- 4ML 30% HYDROGEN PEROXIDE

4 DROPS CONC. HYDROCHLORIC ACID
150MM TEST TUBE

ADD 4ML ACETONE AND 4ML HYDROGEN PEROXIDE TO THE TEST TUBE. THEN ADD 4 DROPS CONCENTRATED HYDROCHLORIC ACID. IN 10-20 MINUTES A WHITE SOLID SHOULD BEGIN TO APPEAR. IF NO CHANGE IS OBSERVED, WARM THE TEST TUBE IN A WATER BATH AT 40 CELSIUS. ALLOW THE REACTION TO CONTINUE FOR TWO HOURS. SWIRL THE SLURRY AND FILTER IT. LEAVE OUT ON FILTER PAPER TO DRY FOR AT LEAST TWO HOURS. TO IGNITE, LIGHT A CANDLE TIED TO A METER STICK AND LIGHT IT (WHILE STAYING AT LEAST A METER AWAY)

.

B. SMOKE SMOKE SMOKE...

THE FOLLOWING REACTION SHOULD PRODUCE A FAIR AMOUNT OF SMOKE. SINCE THIS REACTION IS NOT ALL THAT DANGEROUS YOU CAN USE LARGER AMOUNTS IF NECESSARY FOR LARGER AMOUNTS OF SMOKE.

6G ZINC POWDER
1G SULFUR POWDER

INSERT A RED HOT WIRE INTO THE PILE, STEP BACK. A LOT OF SMOKE SHOULD BE CREATED.

THERE ARE MANY OTHER EXPERIMENTS I COULD HAVE INCLUDED, BUT I WILL SAVE THEM FOR THE NEXT CHEMIST'S CORNER ARTICLE. UPCOMING ARTICLES WILL INCLUDE GLOW-IN-THE-DARK REACTIONS, 'PARTY' REACTIONS, THINGS YOU CAN DO WITH HOUSEHOLD CHEMICALS, AND MORE...

I WOULD LIKE TO GIVE CREDIT TO A BOOK BY SHAKASHARI ENTITLED "CHEMICAL DEMONSTRATIONS" FOR A FEW OF THE PRECISE AMOUNTS OF CHEMICALS IN SOME EXPERIMENTS.

THIS IS IT FOR CHEMIST'S CORNER #1... LOOK FOR CHEMIST'S CORNER #2: WHAT TO DO WITH HOUSEHOLD CHEMICALS...

...ZAPHOD BEEBLEBROX/MPG!

THE CHEMIST'S CORNER
ARTICLE #2: HOUSEHOLD CHEMICALS
BY ZAPHOD BEEBLEBROX/MPG

THIS ARTICLE DEALS WITH INSTRUCTIONS ON HOW TO DO SOME INTERESTING EXPERIMENTS WITH COMMON HOUSEHOLD CHEMICALS. SOME MAY OR MAY NOT WORK DEPENDING ON THE CONCENTRATION OF CERTAIN CHEMICALS IN DIFFERENT AREAS AND BRANDS. I WOULD SUGGEST THAT THE PERSON DOING THESE EXPERIMENTS HAVE SOME KNOWLEDGE OF CHEMISTRY, ESPECIALLY FOR THE MORE DANGEROUS EXPERIMENTS.

I AM NOT RESPONSIBLE FOR ANY INJURY OR DAMAGE CAUSED BY PEOPLE USING THIS INFORMATION. IT IS PROVIDED FOR USE BY PEOPLE KNOWLEDGABLE IN CHEMISTRY WHO ARE INTERESTED IN SUCH EXPERIMENTS AND CAN SAFELY HANDLE SUCH EXPERIMENTS.

=====

I. A LIST OF HOUSEHOLD CHEMICALS AND THEIR COMPOSITION

VINEGAR: 3-5% ACETIC ACID

BAKING SODA: SODIUM BICARBONATE

DRAIN CLEANERS: SODIUM HYDROXIDE

SANI-FLUSH: 75% SODIUM BISULFATE

AMMONIA WATER: AMMONIUM HYDROXIDE

CITRUS FRUIT: CITRIC ACID

TABLE SALT: SODIUM CHLORIDE

SUGAR: SUCROSE

MILK OF MAGNESIA- MAGNESIUM HYDROXIDE

TINCTURE OF IODINE- 47% ALCOHOL, 4% IODINE

RUBBING ALCOHOL- 70 OR 99% (DEPENDS ON BRAND) ISOPROPYL ALCOHOL (DO NOT DRINK!)

ETC...

EXP #1: YE OLD FIZZ EXPERIMENT

MIX VINEGAR WITH BAKING SODA. IT PRODUCES SODIUM ACETATE AND CARBONIC ACID. CARBONIC ACID QUICKLY DECOMPOSES INTO CARBON DIOXIDE AND WATER, RESULTING IN THE "FIZZ".

THIS SIMPLE REACTION CAN BE CONTAINED IN A SMALL BOTTLE OR SOMETHING, AND WHEN ENOUGH PRESSURE BUILDS UP IT WILL BREAK OPEN. I SINCERELY DOUBT THAT IT WILL BLOW "ALL FOUR WALLS OFF THE HOUSE" AS SOME LOSER WROTE IN HIS SAFEHOUSE ARTICLE. THE SAME BASIC THING CAN BE DONE WITH DRY ICE & WATER, BAKING POWDER & WATER, CITRIC ACID & BAKING SODA, AND MANY OTHER COMBINATIONS.

EXP #2: A FRUITY BATTERY

IF YOU'RE EVER IN NEED OF A LITTLE POWER, GET YOUR HANDS ON THESE:

A CITRUS FRUIT (LEMON, ORANGE, ETC)

HOMCHEM3.TXT

A SMALL ZINC STRIP
A SMALL COPPER STRIP

JUST STICK THE ZINC STRIP IN ONE END OF A LEMON AND A COPPER STRIP IN THE OTHER. YOU NOW HAVE A 1.5 VOLT BATTERY! JUST ATTACH THE WIRES TO THE COPPER & ZINC STRIPS...

EXP #3: GENERATING CHLORINE GAS

THIS IS MUCH MORE DANGEROUS THAN THE OTHER TWO EXPERIMENTS, SO YOU SHOULD KNOW WHAT YOU'RE DOING BEFORE YOU TRY THIS...

EVER WONDER WHY AMMONIA BOTTLES ALWAYS SAY 'DO NOT MIX WITH CHLORINE BLEACH', AND VISA-VERSA? THAT'S BECAUSE IF YOU MIX AMMONIA WATER WITH AJAX OR SOMETHING LIKE IT, IT WILL GIVE OFF CHLORINE GAS. TO CAPTURE IT, GET A LARGE BOTTLE AND PUT AJAX IN THE BOTTOM. THEN POUR SOME AMMONIA DOWN INTO THE BOTTLE. SINCE THE CHLORINE IS HEAVIER THAN AIR, IT WILL STAY DOWN IN THERE UNLESS YOU USE LARGE AMOUNTS OF EITHER AJAX OR AMMONIA (DON'T!). FOR SOMETHING FUN TO DO WITH CHLORINE STAY TUNED.... INHALING CHLORINE GAS CAN KILL YOU.

EXP #4: CHLORINE + TURPENTINE

TAKE A SMALL CLOTH OR RAG AND SOAK IT IN TURPENTINE. QUICKLY DROP IT INTO THE BOTTLE OF CHLORINE. IT SHOULD GIVE OFF A LOT OF BLACK SMOKE AND PROBABLY START BURNING...

EXP #5: GENERATING HYDROGEN GAS

TO GENERATE HYDROGEN, ALL YOU NEED IS AN ACID AND A METAL THAT WILL REACT WITH THAT ACID. TRY VINEGAR (ACETIC ACID) WITH ZINC, ALUMINUM, MAGNESIUM, ETC. YOU CAN COLLECT HYDROGEN IN SOMETHING IF YOU NOTE THAT IT IS LIGHTER THAN AIR.... LIGHT A SMALL AMOUNT AND IT BURNS WITH A SMALL *POP*.

ANOTHER WAY OF CREATING HYDROGEN IS BY THE ELECTROLYSIS OF WATER. THIS INVOLVES SEPARATING WATER (H₂O) INTO HYDROGEN AND OXYGEN BY AN ELECTRIC CURRENT. TO DO THIS, YOU NEED A 6-12 VOLT BATTERY, TWO TEST TUBES, A LARGE BOWL, TWO CARBON ELECTRODES (TAKE THEM OUT OF AN UNWORKING 6-12 VOLT BATTERY), AND TABLE SALT. DISSOLVE THE SALT IN A LARGE BOWL FULL OF WATER. SUBMERGE THE TWO TEST TUBES IN THE WATER AND PUT THE ELECTRODES INSIDE THEM, WITH THE MOUTH OF THE TUBE AIMING DOWN. CONNECT THE BATTERY TO SOME WIRE GOING DOWN TO THE ELECTRODES. THIS WILL WORK FOR A WHILE, BUT CHLORINE WILL BE GENERATED ALONG WITH THE OXYGEN WHICH WILL UNDOUBTEDLY CORRODE YOUR COPPER WIRES LEADING TO THE CARBON ELECTRODES... (THE TABLE SALT IS BROKEN UP INTO CHLORINE AND SODIUM IONS, THE CHLORINE COMES OFF AS A GAS WITH OXYGEN WHILE SODIUM REACTS WITH THE WATER TO FORM SODIUM HYDROXIDE....). THEREFORE, IF YOU CAN GET YOUR HANDS ON SOME SULFURIC ACID, USE IT INSTEAD. IT WILL NOT AFFECT THE REACTION OTHER THAN MAKING THE WATER CONDUCT ELECTRICITY.

TRICITY.

EXP #6: HYRDOGEN + CHLORINE

TAKE THE TEST TUBE OF HYDROGEN AND COVER THE MOUTH WITH YOUR THUMB. KEEP IT INVERTED, AND BRING IT NEAR THE BOTTLE OF CHLORINE (NOT ONE THAT HAS REACTED WITH TURPENTINE). SAY "GOODBYE TEST TUBE", AND DROP IT INTO THE BOTTLE. THE HYDROGEN AND CHLORINE SHOULD REACT AND POSSIBLY EXPLODE (DEPENDING ON PURITY AND AMOUNT OF EACH GAS). AN INTERESTING THING ABOUT THIS IS THEY WILL NOT REACT IF IT IS DARK AND NO HEAT OR OTHER ENERGY IS AROUND. WHEN A LIGHT IS TURNED ON, ENOUGH ENERGY IS PRESENT TO CAUSE THEM TO REACT...

EXP #7: PREPARATION OF OXYGEN

GET SOME HYDROGEN PEROXIDE (FROM A DRUG STORE) AND MANGANESE DIOXIDE (FROM A BATTERY- IT'S A BLACK POWDER). MIX THE TWO IN A BOTTLE, AND THEY GIVE OFF OXYGEN. IF THE BOTTLE IS STOPPERED, PRESSURE WILL BUILD UP AND SHOOT IT OFF. TRY LIGHTING A WOOD SPLINT AND STICKING IT (WHEN ONLY GLOWING) INTO THE BOTTLE. THE OXYGEN WILL MAKE IT BURST INTO FLAME. EXPERIMENT WITH IT. THE OXYGEN WILL ALLOW THINGS TO BURN BETTER...

EXP #8: ALCOHOL

BUY SOME RUBBING ALCOHOL IN A DRUG STORE. USUALLY THIS IS EITHER 70% OR 99% ALCOHOL AND BURNS JUST GREAT. YOU CAN SOAK A TOWEL IN WATER AND THEN IN ACOHOL, LIGHT THE TOWEL, AND WHEN IT FINISHES BURNING THE ALCOHOL, THE FLAME SHOULD GO OUT AND LEAVE THE TOWEL UNHARMED. NICE FOR "PARTY TRICKS", ETC.

EXP #9: IODINE?

TINCTURE OF IODINE CONTAINS MAINLY ALCOHOL AND A LITTLE IODINE. TO SEPERATE THEM, PUT THE TINCTURE OF IODINE IN A METAL LID TO A BOTTLE AND HEAT IT OVER A CANDLE. HAVE A STAND HOLDING ANOTHER METAL LID DIRECTLY OVER THE TINCTURE (ABOUT 4-6 INCHES ABOVE IT) WITH ICE ON TOP OF IT. THE ALCOHOL SHOULD EVAPORATE, AND THE IODINE SHOULD SUBLIME, BUT SHOULD REFORM IODINE CRYSTALS ON THE COLD METAL LID DIRECTLY ABOVE. IF THIS WORKS (I HAVEN'T TRIED), YOU CAN USE THE IODINE ALONG WITH HOUSEHOLD AMMONIA TO FORM NITROGEN TRIIODIDE (DISCUSSED IN ARTICLE #1).

EXP #10: GRAIN-ELEVATOR EXPLOSION!

WANT TO TRY YOUR OWN 'GRAIN-ELEVATOR EXPLOSION'? GET A CANDLE AND SOME FLOUR.. LIGHT THE CANDLE AND PUT SOME FLOUR IN YOUR HAND. TRY VARIOUS WAYS OF GETTING THE FLOUR TO LEAVE YOUR HAND AND BECOME DUST RIGHT OVER THE CANDLE FLAME. THE ENORMOUS SURFACE AREA ALLOWS ALL THE TINY DUST PARTICLES TO BURN, WHICH THEY DO AT ABOUT THE SAME TIME, COMBINING TO FORM A FIREBALL EFFECT. IN GRAIN ELEVATORS, MUCH THE SAME THING HAPPENS. IF YOU CAN GET YOUR HANDS ON SOME LYCOPODIUM POWDER, DO. THIS WILL WORK MUCH BETTER, CREATING HUGE FIREBALLS THAT ARE UNEXPECTED.

ED.

THAT'S ENOUGH FOR NOW... MORE TO COME IN LATER CHEMIST'S CORNER ARTICLES...

...ZAPHOD BEEBLEBROX/MPG!

TRIXS OF THE TRADE...APPLE-BOOTLEGGER

/-/-/-/-/-/-/-/-/-/-/-/-/-/-/-/-/-/

DOWNLOADED FROM P-80 SYSTEMS.....