

FZFF5.TXT

FZFF05

```

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
X                                                    X
X                                                    X
X          FOLO ZONE FUN FILES                      X
X                                                    X
X          FILE "5" -- SILVER ACETYLIDE             X
X                                                    X
X    H I G H   *   E X P L O S I V E                X
X                                                    X
X                    by                             X
X    Z. DeBuggah of the Folo Zone Gang.            X
X                                                    X
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

```

```

<^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^>
<                                                    >
<  Content Hazard Rating -- *EXTREME*             >
<                                                    >
<                                                    >
<  Hazard Type -- S E N S I T I V E                >
<    H I G H   E X P L O S I V E                    >
<                                                    >
<  Special Precautions -- WHOLE BODY.             >
<    Wear heavy clothing including,                >
<    gloves, goggles and full-face                >
<                    shield.                       >
<                                                    >
<                                                    >
<vvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvv>

```

A L E R T:-

My alert to you this time is in the form of a tale I often tell.

From my years at East Des Moines High, I have a friend and fellow member of the LEE TOWNSHIP ROCKET SOCIETY, who once acquired fame and even a picture on News At Ten by launching a three stage rocket from an East Des Moines City park. His name was John Hill, and he was one of our very best rocket engineers. Rockets crafted by his hands matched the workings of the best of us. He did in fact safely soft land stages One and Two right where he wanted them, with parachutes. The only problem was that the timing fuse between stages Two and Three was slower than expected, and so the third stage didn't interstage until the second two stages had entered turnover at the peak of its trajectory and so stage Three took off horizontally Westward across the Des Moines River. He couldn't find the third stage until he saw on the Ten O'Clock News (KEZI Channel 9.) that it had Crash Landed on a Police Car over by Drake University. We'd all seen it, but John called the Police right away and said he wanted his

FZFF5.TXT

rocket back. He did get it; but he also got a \$5.00 fine as well as a duly Authorized permit for the LTRS and a request from the Judge for an invitation to our next Official Club Launching. [He came too.]

Now that intro was so you won't be surprised to know that when Doug Seeley found the recipe for SILVER ACETYLIDE in the library, John Hill went directly into Mass Production. He is the source of my information on the properties of this enticing chemical, <except for how to make it which I got from Doug>. John Hill is also the only one of us that ever screwed up with Silver Acetylde, and he missed six weeks of our senior year <He was blind for 4 of them> so that we could know some of what we know about it. So:-

P R O P E R T I E S O F S I L V E R A C E T Y L I D E : -

IT EXPLODES WHEN YOU:-

- Hit it.
- Heat it.
- Grind it.
- Pack it.
- Shake it.
- Drop it.

WHEN IT DETONATES:-

It disperses a high velocity powder of molecular silver and of amorphous carbon, (both black) which can cause blindness (possibly permanent) unless you take proper precautions. <See File Header above.> It can fillet open your skin and deposit Silver Poisoning directly into your bloodstream if it detonates too close to unprotected skin.

BEST POTENTIAL USE:-

Silver acetylde should be properly classed as a detonator type of explosive. Its explosive strength is concentrated near the material itself only. We used to use it to open the nose-cones of our rockets because we knew it would not tear the parachute through a cotton ball. We also used it to ignite the dispersing charge explosive in a fireworks cluster in the nose cone of a sky rocket for the 4th of July.

Silver Acetylde is only a little less touchy than fulminate of mercury but is very MUCH LESS POISONOUS. Its raw materials are readily obtainable, and can be stored safely for long periods of time. Ag₂C₂ can also be detonated by fire without compression, allowing for lighter weight construction.

ESSENTIAL PRECAUTIONS:-

Make and especially store only small amounts of Silver Acetylde. 1/4 oz. (7 g.) or less at a time. Each 1/4 oz. container must be at least 8" through

styrofoam or 6" through shredded wood from the next nearest container of it.

Use it fresh. Do not store it for more than a few days because of the risk of accidental detonation. If you make too much for a foreseeable need, detonate the excess when you are through.

YOU WILL NEED :-

An acetylene source; a tank such as on a welders torch, or the Acetylene Generator or bags of acetylene filled by the Generator (As shown in the file FZFF03; Acetylene Gas.).

A glass or ceramic container of about 250-400 ml capacity (1-2 cups).

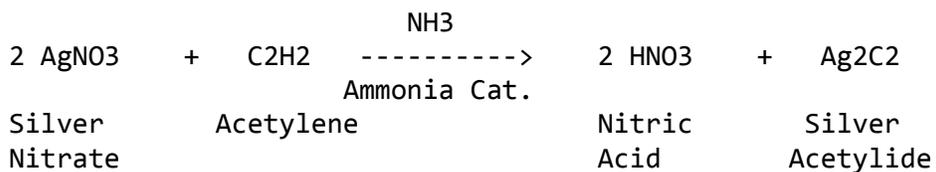
Silver Nitrate (Technical grade is sufficient). Obtainable from VW&R, American Scientific or other lab supply house. Better grades can cost around \$90/qtr. lb.(4 oz. = 113 g.).

Distilled Water (or any very low chloride water like rainwater and some well, lake, or stream waters. Snow melt is excellent, but can be scarce in some parts of the country.)

Clear aqueous ammonia solution. Very little is needed.

Filter paper and a filter funnel. Use a fine filter paper.

CHEMISTRY:-



THE SETUP/ASSEMBLY:-

Put 150-200 ml of distilled water into the REACTION BEAKER. Then add up to two ounces (56 g.) [a rounded TEASPOONFUL] of Silver Nitrate Crystals. Stir the Reaction Beaker with a plastic, glass or wood rod <NO METAL> until all the crystals have dissolved. Then stir in 5-10 ml (1-2 teaspoonsfull) of clear ammonia solution

THE REACTION:-

Now from whatever source of acetylene you have <tank, bag or Generator> put the outlet tube to the bottom of the Reaction Beaker with the NH3/AgNO3 solution and begin bubbling acetylene gently through it. Before long, the REACTION SOLUTION will turn milky and then white curds will form at the bottom of the beaker.

FZFF5.TXT

The reaction is complete when the water begins to clear a bit. The END OF REACTION TEST is to stop the bubbling long enough to let the water over the precipitated Silver Acetylide to become clear, then take a drop of the clear liquid and drop it on a few grains of salt on a dark colored plate. If the drop stays clear the reaction is complete. If the drop turns milky around the salt grains, resume bubbling the acetylene, as there is still unreacted silver in the Reaction Solution.

COLLECTION/PURIFICATION:-

When the Reaction Solution tests COMPLETE, filter the white Silver Acetylide (powdery curdlets) onto filter paper in the filter funnel. Rinse the precipitate on the paper with distilled water with a few drops of clear ammonia per cup of water. An ounce or so of rinse water dripped slowly over all of the precipitate in the funnel is sufficient.

DRYING:-

After rinsing, AIR DRY the filter papers. Remove the filter paper with the Silver Acetylide from the funnel and open it carefully to keep all the Ag₂C₂ on top of the filter paper. Place the filter paper on a mat of paper towels or news paper, indoors in a protected area. Let it dry undisturbed, which will take time varying inversely with the relative humidity. <<DO NOT HEAT AT ALL>> or you are likely to lose the whole batch in one loud black >BANG<.

STORAGE:-

When the filter papers have dried, gently scrape all of the Ag₂C₂ cake loose from and into the center of the piece of filter paper with a spatula or a dull (as in butter) knife. Gently chop (spatula or butter knife) the cake into grains or powder (depending on your patience level) being careful not to chop through the filter paper, or spill it. <DO NOT GRIND OR CRUSH WITH FORCE>, that's how John Hill got his; trying to crush the Ag₂C₂ in a mortar and pestle. When you have it ready, fold some envelopes of fresh filter paper, and put about 1/4 oz. (7 g.) in each. Fold them closed and put each one separately into stamp/coin collector sized zip-loc bags or glassine paper envelopes. Store the envelopes in a box of plastic pop-corn or shredded wood or paper with 6-8" spaces between envelopes

Use the Ag₂C₂ fresh. It is not a safe thing to have lying around.

USING Ag₂C₂:-

If you've gotten this far, you'll have your own use for it. Except for holiday celebration amusement, I've given you my uses for it above.

FZFF5.TXT

Downloaded From P-80 Systems 304-744-2253