1. Foreword

WARNING! This manual is for informational purposes only. Neither the author nor the publisher assumes any responsibility for the use or misuse of information in this book.

"During the Cuban Revolutionary War half of the comrades who were assigned the task of producing homemade explosives and devices were either killed or seriously injured."
Ernesto Che Guevara

This manual is intended to demonstrate the ease with which improvised explosive devices can be made from materials commonly used by industry.
I have included fifty common chemicals which will react explosively in contact with sulfuric acid and/or nitric acid. I have selected these specific chemicals because (1) sulfuric acid and nitric acid are the most common acids in America; (2) they are comparatively safe to handle; (3) the simplicity in designing an explosive device in which one component is acid.
This manual is not a chemistry book and does not dwell in depth on the health risks or chemical reaction hazards which accompany these chemicals. Most of them will react violently with many other chemicals than those I describe.
These chemicals are all potentially dangerous or they would not have a place in this work. With proper care and safety precautions these
chemicals can be used, and are used daily, in normal industrial settings.

2. Safety

In all dangerous situation it is always wise to take all possible precautions. Here are the ten most important safety tips:

1. Never store chemicals for extended periods.
2. Never store chemical combinations for any length of time.
3. Work in a cool, well ventilated area.
4. Keep sources of heat and electricity well away from the work area.
5. Keep the number of people in the work area to an absolute minimum.
6. Keep materials far apart.
7. Use a respirator while working.
8. Use safety goggles.
9. Wear as much protective rubber clothing as possible.
10. Have appropriate fire fighting equipment and large volumes of water close at hand.

3. Acids

Sulfuric acid (H2SO4)

The most highly produced industrial chemical in the U.S.A.

Synonyms: Oil of vitriol, dipping acid.
Description: Colorless or dark brown, oily liquid.
Uses: Manufacture of iron, steel, rayon, film, fertilizers and dye; petroleum refining; etching; alkylation catalyst; electroplating baths; laboratory reagent; nonferrous metallurgy and batteries.
Hazards: Highly toxic, extremely corrosive to body tissue; will cause immediate and severe burns; inhalation of vapor will cause loss of consciousness and severely damaged lung tissue; mists will damage skin, eyes and respiratory tract. Keep cool and dry.
First aid: Inhalation - Move victim to fresh air. Give artificial respiration of oxygen if victim has stopped breathing.
Ingestion - Give large amounts of water if victim is conscious. Do not induce vomiting. Skin contact - Remove contaminated clothing. Wash with large amounts of water. Eye contact - Wash with large amounts of water. SEEK MEDICAL ATTENTION!
Fire fighting: Large volumes of water.
Nitric acid (HNO₃)

The tenth highest-volume industrial chemical produced in the United States.

Synonyms: Aquas fortis, hydrogen nitrate, azotic acid, engravers acid.
Description: Transparent, colorless or yellowish, fuming liquid.
Uses: Manufacture of ammonium nitrate fertilizer, dyes, drugs, lacquers, cellulose nitrate, nitrate salts, rubber chemicals and urethanes; ore flotation; metallurgy; photoengraving; etching steel; reprocessing spent nuclear fuel.
Hazards: Highly toxic; extremely corrosive to body tissue; will cause immediate and severe burns; will cause extensive damage to the eyes and respiratory system. Keep dry and cool.
First aid: Inhalation - Move victim to fresh air. Give artificial respiration of oxygen if victim has stopped breathing. If damage to respiratory system clears up, it will, in all cases, return in a few hours in a more serious form. Ingestion - Give large amounts of water if victim is conscious. Do not induce vomiting. Skin contact - Remove contaminated clothing. Wash with large amounts of water. Eye contact - Wash with large amounts of water. SEEK MEDICAL ATTENTION! Fire fighting: Large volumes of water.

4. Industrial Chemicals

ACETIC ACID (C₂H₄O₂)

Synonyms: Methane carboxylic acid, vinegar acid, ethanoic acid.
Description: Clear colorless liquid, pungent odor.
Uses: Manufacture of cellulose acetate, plastics, dyes, insecticides, pharmaceuticals; textile printing.
Hazards: Moderately toxic; can damage skin. Do not expose to heat or flame.
Fire fighting: CO₂, dry chemical, alcohol foam, foam, mist.
Will explode on contact with: H₂SO₄, HNO₃

ACETIC ANHYDRIDE (C₄H₆O₃)

Synonyms: Acetyl oxide, acetic oxide, ethanoic anhydride.
Description: Colorless liquid, strong acetic odor.
Uses: Manufacture of pharmaceuticals, perfumes, dyes, vinyl acetate. Esterfying agent for food starch.
Hazards: Moderately toxic; can damage skin. Keep cool and dry.
Fire fighting: CO₂, dry chemical, alcohol foam.
Will explode on contact with: H₂SO₄, HNO₃
ACETONE CYANOHYDRIN (C4H7NO)

Synonyms: Ol-hydroxy isobutyronitrile  
Description: Colorless liquid.  
Uses: Insecticides; Intermediate for organic synthesis.  
Hazards: Highly toxic; avoid inhalation. Keep cool.  
Fire fighting: CO2, dry chemical, alcohol foam.  
Will explode on contact with: H2SO4

ACROLEIN (C3H4O)

Synonyms: Propenal, acrylic aldehyde, allyl aldehyde, acraldehyde.  
Description: Yellow or colorless liquid, choking odor.  
Uses: Manufacture of resins, pharmaceuticals and polyurethane; herbicide; warning agent in gases.  
Hazards: Highly toxic; avoid inhalation or skin contact. Do not expose to heat or flame.  
Fire fighting: CO2, dry chemical, alcohol foam.  
Will explode on contact with: H2SO4, HNO3

ALLYL ALCOHOL (C3H6O)

Synonyms: Vinyl carbinol  
Description: Clear liquid, pungent odor.  
Uses: Manufacture of resins, plasticizers, pharmaceuticals; used as a herbicide.  
Hazards: Highly toxic; avoid inhalation or skin contact. Dangerous when exposed to heat or flame.  
Fire fighting: CO2, alcohol foam, dry chemical.  
Will explode on contact with: H2SO4, HNO3

ALLYL CHLORIDE (C3H5Cl)

Synonyms: 3-Chloropropene  
Description: Colorless liquid, pungent odor.  
Uses: Manufacture of varnish, plastic, adhesives, pharmaceuticals.  
Hazards: Highly toxic; avoid inhalation or skin contact. Do not expose to heat or flame; keep well ventilated.  
Fire fighting: CO2, alcohol foam, dry chemical.  
Will explode on contact with: H2SO4, HNO3
ANILINE (C6H7O)

Synonyms: Aminobenzene, aniline oil, phenylamine.
Description: Colorless oily liquid. Strong odor. Brown when exposed to light.
Uses: Manufacture of rubber, dyes, photographic chemicals, pharmaceuticals and urethane foam; refining petroleum.
Hazards: Highly toxic; avoid inhalation and skin contact; keep cool.
Fire fighting: CO2, alcohol foam, dry chemical.
Will explode on contact with: H2SO4, HNO3

ANILINE ACETATE (C8H11NO2)

Synonyms: None
Description: Colorless liquid, becomes dark with age.
Uses: Organic synthesis.
Hazards: Highly toxic, avoid inhalation. Keep cool.
Fire fighting: CO2, alcohol foam, dry chemical.
Will explode on contact with: H2SO4, HNO3

ANILINE HYDROCHLORIDE (C6H8NCl)

Synonyms: Aniline chloride, aniline salt.
Description: White or green crystals.
Uses: Dyeing and printing.
Hazards: Highly toxic, avoid inhalation. Keep away from heat and flame.
Fire fighting: Water, CO2, water mist or spray, dry chemical.
Will explode on contact with: H2SO4, HNO3

BENZOYL PEROXIDE (C14H10O4)

Synonyms: Lucidol, dibenzoyl peroxide
Description: White granules, tasteless, odorless.
Uses: Bleaching agent for flour, fats, oils and waxes; drying agent for unsaturated oils and pharmaceuticals; production of cheese.
Hazards: Toxic; avoid inhalation; will irritate skin. Do not expose to heat, flame, sparks or strong sunlight; Do not shock.
Fire fighting: Water, foam
Will explode on contact with: H2SO4, HNO3

CARBON DISULFIDE (CS2)

Synonym: Carbon bisulfide
Description: Clear, colorless liquid. Odorless.
Uses: Manufacture of viscose rayon, cellophane and flotation agents.
Hazards: Highly toxic; avoid inhalation or contact with skin. Do not expose to heat, flame, sparks, or friction.
Fire fighting: Water, CO2, dry chemical.
Will explode on contact with: H2SO4

CHLOROSULFONIC ACID (HSO3Cl)

Synonym: Sulfuric chlorohydrin.
Description: Clear or cloudy, colorless or yellow liquid. Sharp odor.
Uses: Manufacture of synthetic detergent, pharmaceuticals, dyes, pesticides, resins and smoke-producing chemicals.
Hazards: Highly toxic; Avoid inhalation and skin contact. Keep away from water.
Fire fighting: None required.
Will explode on contact with: H2SO4, HNO3

CRESOL (C7H8O)

Synonyms: Cresylic acid, cresylol, tricresol.
Description: Can be clear or yellowish or yellow-brown or pink. Liquid.
Uses: Disinfectant; resins; ore flotation; textile scouring agent; synthetic food flavors.
Hazards: Moderately toxic; can burn skin. Keep away from heat and flame.
Fire fighting: Foam, CO2, dry chemical.
Will explode on contact with: HNO3

CUMENE (C9H12)

Synonyms: Isopropyl benzene, z-phenyl propane, cumol.
Description: Colorless liquid.
Uses: Production of phenol, acetone and alpha-methylstyrene; solvent.
Hazards: Moderately toxic. Do not expose to flame.
Fire fighting: Foam, CO2, dry chemical.
Will explode on contact with: HNO3

CYANIC ACID (HOCN)

Synonym: Isocyanic acid
Description: Clear liquid. Acrid odor.
Uses: Synthesis of organic compounds.
Hazards: Highly toxic; avoid inhalation or skin contact. Keep cool.
Fire fighting: CO2, dry chemical.
Will explode on contact with: H2SO4, HNO3

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CYANIDE OF SODIUM (NaCN)

Synonym: Sodium cyanide
Description: White, crystalline powder.
Uses: Extraction of gold and silver from ores; heat treatment of metals; cleaning metals; fumigation.
Hazards: Highly toxic. Avoid inhalation and skin contact, though the latter is a lesser problem. Keep cool and dry.
Fire fighting: CO2, dry chemical.
Will explode on contact with: HNO3

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CYCLOHEXANOL (C6H12O)

Synonym: Hexahydrophenol
Description: Colorless needles in viscous liquid. Camphorlike odor.
Uses: Manufacture of soap, insecticides, nylon, resins, lacquers, paint, varnish, finishes, removers and polishers.
Hazards: Moderately toxic. Do not expose to heat or flame.
Fire fighting: Alcohol foam, foam, CO2, dry chemical.
Will explode on contact with: HNO3

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CYCLOHEXANONE (C6H10O)

Synonyms: Ketohexamethylene, pimelic ketone
Description: Colorless liquid with acetone-like odor.
Uses: Manufacture of woodstains, paint and varnish remover, spot remover and polish; lube-oil additive; solvent; degreasing metals; leveling agent in dyes; organic synthesis.
Hazards: Moderately toxic. Do not expose to heat or flame.
Fire fighting: Alcohol foam, foam, CO2, dry chemical.
Will explode on contact with: HNO3

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DIISOBUTYLENE (C8H16)

Synonym: Trimethylpentene
Description: Colorless liquid
Uses: Manufacture of plasticizers and rubber chemicals; alkylation, antioxidants, surfactants, lube-oil additives.
Hazards: Moderately toxic. Keep strictly away from any heat source.
Fire fighting: Foam, CO2, dry chemical
Will explode on contact with: H2SO4

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DIMETHYL KETONE (C3H6O)

Synonyms: Ketone propane, propaneone, acetone.
Description: Colorless liquid, mint-like odor.
Uses: Manufacture of paint, varnish, cellulose acetate; testing vulcanized rubber products; solvent.
Hazards: Moderately toxic, keep away from flame.
Fire fighting: CO2, dry chemical, alcohol foam.
Will explode on contact with: H2SO4, HNO3

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EPICHLOROHYDRIN (C3H5ClO)

Synonym: 1-chloro-2,3-epoxypropane
Description: Colorless liquid, chloroform-like odor.
Uses: Manufacture of epoxy and phenoxy resins, glycerol and high wet-strength resins for paper; solvent for cellulose esters and ethers.
Hazards: Highly toxic. Avoid inhalation or skin contact. Do not expose to heat or flame.
Fire fighting: Foam, alcohol foam, CO2, dry chemical.
Will explode on contact with: H2SO4, HNO3

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ETHYL ALCOHOL (C2H5OH)

Synonyms: Ethanol, methyl carbinol, spirit of wine, grain alcohol.
Description: Clear colorless liquid, burning taste.
Uses: Manufacture of dyes, pharmaceuticals, detergents, cleansers, cosmetics, antifreeze, beverages and gasohol; solvents, resins, fats and oil.
Hazards: Moderately toxic. Do not expose to heat or flame.
Fire fighting: Alcohol foam, CO2, dry chemical.
Will explode on contact with: HNO3

NOTE: Ethyl alcohol was the 50th highest-volume chemical in the U.S.A. in 1979. Due to the increasing popularity of gasohol it is rapidly becoming more common. It is easily produced from the fermentation of biomass. It is relatively safe to handle, even in the context under discussion.

For more information contact:
Solar Energy Research Institute (SERI)
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1617 Cole Boulevard
ETHYLENE CYANOHYDRIN (C3H5NO)

Synonyms: Beta-hydroxypropionitrile, hydracyclo-nitrile, glycol cyanohydridn.
Description: Colorless to yellow liquid.
Uses: Solvent for cellulose esters and inorganic salts; organic intermediate for acrylates.
Hazards: Moderately toxic. Do not expose to heat or flame. Keep dry.
Fire fighting: CO2, dry chemical, alcohol foam.
Will explode on contact with: H2SO4

ETHYLENE DIAMINE (C2H8N2)

Synonyms: 1,2-ethane diamine, 1,2-diamino ethane.
Description: Colorless liquid. Ammonia-like odor.
Uses: Manufacture of resins an textile lubricants; solvent; fungicide; antifreeze inhibitor.
Hazards: Highly toxic; avoid inhalation and skin contact. Do not expose to heat or flame.
Fire fighting: CO2, alcohol foam, dry chemical.
Will explode on contact with: H2SO4, HNO3

ETHYLENE GLYCOL (C2H6O2)

Synonyms: 1,2-ethanediol, glycol, ethylene alcohol, glycol alcohol.
Description: Colorless liquid. Sweet taste.
Uses: Manufacture of lacquers, resins, inks, wood stains, adhesives, leather dyes and deicing fluid; antifreeze; coolant;heat transfer agent.
Hazards: Moderately toxic; can irritate skin. Do not expose to flame.
[ Transcriber's note: In my opinion highly toxic, can cause fatal kidney failure even in very small doses, about 100 cc is enough! ]
Fire fighting: Alcohol foam, water, foam, CO2, dry chemical.
Will explode on contact with: H2SO4

ETHYLENE IMINE (C2H5N)

Synonyms: Ethylenimine, dimethylenimine.
Description: White liquid. Pungent odor.
Uses: Manufacturing of pharmaceuticals, adhesives and protective coatings; oil and lubricant refining.
Hazards: Highly toxic; avoid inhalation and skin contact. Do not expose to heat or flame.
Fire fighting: CO2, dry chemical, alcohol foam.
Will explode on contact with: H2SO4, HNO3

HYDRAZINE (N2H4)

Synonyms: Hydrazine base, diamine, hydrazine anhydrous.
Description: Colorless fuming liquid or white crystals.
Uses: Manufacture of drugs, fibers, antioxidants; propellant, plating metal or glass; photographic developers.
Hazards: Highly toxic. Avoid inhalation or skin contact. Keep cool and do not jar.
Fire fighting: Foam, CO2, dry chemical.
Will explode on contact with: HNO3

HYDRIODIC ACID (HI)

Synonym: Hydrogen Iodine
Description: Pale yellow liquid. Colorless gas.
Uses: Manufacture of pharmaceuticals; disinfectants; preparation of iodine salts.
Hazards: Moderately toxic; will damage skin. Keep dry.
Fire fighting: Dry chemical, CO2.
Will explode on contact with: HNO3

HYDROFLUORIC ACID (HF)

Synonyms: Hydrogen fluoride, fluorohydric acid.
Description: Clear, colorless, fuming liquid or gas.
Uses: Manufacture of aluminum, fluorocarbons, gasoline, processing uranium; etching glass; acidizing oil wells.
Hazards: Highly toxic; avoid inhalation or skin contact. Keep cool and dry.
Fire fighting: Dry chemical, CO2.
Will explode on contact with: H2SO4

HYDROGEN PEROXIDE (H2O2)

Synonyms: Hydrogen dioxide, T-stuff.
Description: Colorless heavy liquid. Colorless crystals.
[ Transcriber's note: Crystals? I wouldn't say THAT! At least not over its freezing point, -0.4 centigrades.]
Uses: Manufacture of pulp, paper and plasticizers; substitute for chlorine
in water treatment; wine distillation; refining and cleaning metals; bleaching of textiles, wood and fur.
Hazards: Highly toxic, avoid inhalation or skin contact. Keep cool. Do not jar or concentrate. [ Transcriber's note: Keep away from oxidizing salts, like potassium permanganate, manganese dioxide or even blood(!) This is because hydrogen peroxide easily decompose in the presence of a catalyst. ]
Fire fighting: Dry chemical, CO2
Will explode on contact with: H2SO4, HNO3

ISOPRENE (C5H8)
Synonym: 2-methyl-1,3-butadiene
Description: Colorless liquid.
Uses: Manufacture of polyisoprene and butyl rubber.
Hazards: Moderately toxic. Do not expose to heat, flame or sparks.
Fire fighting: CO2, dry chemical.
Will explode on contact with: H2SO4, HNO3

ISOPROPYL ETHER (C6H14O)
Synonyms: 2-isopropoxy propane, oisopropyl ether
Description: Colorless liquid, ethereal odor.
Uses: Manufacture of rubber cement; solvent for oils and dyes; paint and varnish remover.
Hazards: Low toxicity when cool. Keep away from flame or sparks. Do not jar.
Fire fighting: Alcohol foam, CO2, dry chemical.
Will explode on contact with: HNO3

MANGANESE (Mn)
Synonyms: None
Description: Reddish-grey or silvery brittle metallic element.
Uses: Manufacture of steel, aluminum, and non-ferrous alloys; purifying agent in metal production.
Hazards: Highly toxic; avoid inhalation or skin contact. Do not expose to flame. Keep dry.
Fire fighting: Special dry chemical.
Will explode on contact with: HNO3

MESITYL OXIDE (C6H10O)
Synonyms: 4-methyl-3-penten-2-one
Description: Oily, colorless liquid. Honey-like odor.
Uses: Manufacture of methyl isobutyl ketone; solvent; ore flotation; insect repellent; paint and varnish remover.
Hazards: Moderately toxic; avoid skin contact. Do not expose to heat or flame.
Fire fighting: Alcohol foam, CO2, dry chemical
Will explode on contact with: H2SO4, HNO3

METHYL CYANIDE (C2H3N)

Synonyms: Ethanen itrile, acetonitrile.
Description: Colorless liquid. Aromatic odor.
Uses: Manufacture of pharmaceuticals, vegetable oils and hydrocarbons; solvent.
Hazards: Moderately toxic. Keep cool and dry.
Fire fighting: Foam, CO2, dry chemical.
Will explode on contact with: H2SO4

NITROBENZENE (C6H5NO2)

Synonyms: Oil of mirbane, nitrobenzol, mononitrobenzene.
Description: Bright yellow crystals or yellow oily liquid. Almond-like odor.
Uses: Manufacture of aniline, metal polish, shoe polish, benzidine and quinoline; solvent for cellulose ethers.
Hazards: Moderately toxic. Do not expose to heat or flame. Do not jar.
Fire fighting: Water, foam, CO2, dry chemical
Will explode on contact with: HNO3

PERCHLORIC ACID (HClO4)

Synonyms: None
Description: Colorless fuming liquid.
Uses: Manufacture of esters; electropolishing; deposition of lead.
Hazards: Highly toxic; avoid inhalation or skin contact. Keep cool. Do not jar.
Fire fighting: Water, foam.
Will explode on contact with: H2SO4

PHENYL ETHYLENE (C8H8)

Synonyms: Vinyl benzene, styrene (monomer), cinnamene.
PHOSPHOROUS TRICHLORIDE (PCl3)

Synonyms: Phosphorus chloride
Description: Clear colorless fuming liquid.
Uses: Manufacture of pesticides, gasoline additives, dye stuffs and plasticizers; used as a chlorinating agent and as a textile finishing agent.
Hazards: Highly toxic; can damage skin. Keep cool and dry.
Fire fighting: CO2, dry chemical
Will explode on contact with: HNO3

PARA-PHTALIC ACID (C8H6O4)

Synonyms: Benzene dicarboxylic acid, TPA terephthalic acid.
Description: White crystalline needles.
Uses: Manufacture of resins, fibers and films; additive to poultry feed; reagent for alkali in wool.
Hazards: Moderately toxic; can damage skin. Do not expose to heat or flame.
Fire fighting: Foam, CO2, dry chemical.
Will explode on contact with: HNO3

PHTALIC ANHYDRIDE (C8H4O3)

Synonym: Phtalandione
Description: White crystalline needles. Mild odor.
Uses: Manufacture of resins, plasticizers, dyes, chlorinated products, pharmaceuticals and insecticides.
Hazards: Moderately toxic. Do not expose to flame.
Fire fighting: CO2, dry chemical.
Will explode on contact with: HNO3

BETA-PROPIOLACTONE (C3H4O2)

Synonyms: None
Description: Clear liquid, pungent odor.
Uses: Disinfectant, vapor sterilant and organic synthesis.
Hazards: Highly toxic; avoid inhalation or skin contact. Avoid open flame.
Fire fighting: Alcohol foam.  
Will explode on contact with: H2SO4, HNO3

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PROPYLENE OXIDE (C3H6O)

Synonyms: 1,2-epoxypropane, propane oxide, methyl oxirane.  
Description: Colorless liquid. Ethereal odor.  
Uses: Manufacture of urethane foams; detergents, lubricants, solvents, fumigants and surfactants.  
Hazards: Moderately toxic. Do not expose to heat or flame.  
Fire fighting: Alcohol foam, CO2, dry chemical.  
Will explode on contact with: H2SO4

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PYRIDINE (C5H5N)

Synonyms: None  
Description: Colorless liquid. Sharp odor. Burning taste.  
Uses: Manufacture of vitamins, drugs, solvents and antifreeze; waterproofing, denaturing alcohol and textile dyeing; fungicide.  
Hazards: Moderately toxic. Do not expose to heat or flame.  
Fire fighting: Alcohol foam.  
Will explode on contact with: H2SO4, HNO3

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SILVER PERMANGANATE (AgMnO4)

Synonyms: None  
Description: Violet crystalline powder  
Uses: Manufacture of gas masks. Used as an antiseptic.  
Hazards: Moderately toxic. Can miscolor skin. Do not expose to heat or flame. Do not jar.  
Fire fighting: Water  
Will explode on contact with: H2SO4

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TITANIUM (Ti)

Synonyms: None  
Description: Dark gray powder or white lustrous metal.  
Uses: Manufacture of alloys for a variety of special applications; X-ray tube target; electrodes in chlorine batteries.  
Hazards: Non-toxic. Do not expose to heat or flame.  
Fire fighting: Smother with sand, powdered tale or G-1 powder.  
Will explode on contact with: HNO3
O-TOLUIDINE (C7H5N)

Synonyms: o-methylaniline, o-aminotoluene.
Description: Colorless liquid, red or brown if exposed to air.
Uses: Manufacture of textile printing dyes, vulcanization accelerator, organic synthesis.
Hazards: Highly toxic; avoid inhalation or skin contact. Keep cool.
Fire fighting: Foam, CO2, dry chemical.
Will explode on contact with: HNO3

VINYL ACETATE (C4H6O2)

Synonyms: None
Description: Colorless liquid. Becomes solid on exposure to light.
Uses: Manufacture of latex paint, paper coatings, adhesives, textile finishing, safety glass and resins.
Hazards: Moderately toxic. Keep away from heat or flame.
Fire fighting: Alcohol foam, CO2, dry chemical.
Will explode on contact with: H2SO4, HNO3

VINYL CYANIDE (C3H3N)

Synonyms: Acrylonitrile, propane nitrile
Description: Colorless liquid, mild odor.
Uses: Manufacture of acrylic fibers, nitrile rubber, wood pulp and synthetic soil blocks; fubigation of grains.
Hazards: Highly toxic; avoid inhalation and skin contact. Keep cool.
Fire fighting: CO2, dry chemical, alcohol foam.
Will explode on contact with: H2SO4, HNO3

VINYLIDENE CHLORIDE

Synonym: 1,1 dichloro ethylene.
Description: Colorless liquid.
Uses: Manufacture of Saran Wrap, adhesives, and synthetic fibers.
Hazards: Highly toxic; avoid inhalation. Will damage skin. Do not expose to heat or flame.
Fire fighting: Alcohol foam, CO2, dry chemical.
Will explode on contact with: HNO3
5. Devices

Single bottle bomb I:
1. Fill a bottle 90 percent full of acid. Cap securely.
2. Fill a small sack (jute or other sturdy material) with industrial chemical.
3. Tape the package to the side of the bottle. When the bottle is broken the acid will destroy the sack and come into contact with the industrial chemical. Detonation will occur. It is not recommended to throw this device Molotov cocktail-style. It is best dropped off a roof onto enemy troops or vehicles.

Single bottle bomb II:
1. Fill a bottle 90 percent full of acid. Cap securely.
2. Partially cut, thereby weakening it, the glass with a glass cutter.
3. Suspend the bottle with a cord, a minimum of seven feet above a cement or tile floor.
4. Pile industrial chemical on the floor, around but not under the bottle.
5. Attach a cigarette and matches assembly to the cord. The cigarette will eventually ignite the matches. The cord will burn through and the bottle will drop. When the bottle breaks, the acid comes into contact with the industrial chemical. Detonation will occur.

Double bottle bomb I
1. Fill a bottle 90 percent full of acid. Cap securely.
2. Fill a second bottle 90 percent full of industrial chemical. Cap securely.
3. Join the two bottles with heavy tape.
4. Place a small explosive charge between, and in contact with both bottles.
5. Detonate the explosive charge in any convenient manner. However, be sure to use an explosive charge that will break both bottles, but not scatter the contents. One number eight blasting cap will usually suffice. The charge will break both bottles. The acid and the industrial chemical will come into contact. Detonation will occur.

Double bottle bomb II
1. Fill a bottle 90 percent full of acid. Cap securely.
2. Fill a second bottle 90 percent full of industrial chemical. Cap securely.
3. Join the two bottles with heavy tape.
4. Partially cut the glass of each bottle with a glass cutter.
5. Suspend the bottles with cord, a minimum of seven feet above a cement or tile floor.
6. Attach a cigarette and matches assembly to the cord. The cigarette will eventually ignite the matches. The cord will burn through and the bottles will drop. When the bottles break, the acid comes into contact.
with the industrial chemical. Detonation will occur.

Jerry Can Bomb

1. Create a large dent in the top of a metal jerry can.
2. Check carefully that in forming the dent, the jerry can is not ruptured.
3. Fill jerry can with industrial chemical.
4. Pour acid directly into the dent. The acid will burn through the metal and come into contact with the industrial chemical. Detonation will occur.

Transcriber's notes: The SERI part in the Ethyl Alcohol article is to me unexplainable, I wonder why someone would like to order ten gallons of gasohol? %*) Also: If you want to succeed in making a nice acid bomb, both your acid and your "industrial chemical" must be as concentrated and free from other substances as possible. Otherwise, your device could either not work at all, or become a very sensitive thing, blowing off your right arm at no cause, so be careful, for my sake, please...