Appendix B: Legitimate Use Table

Chemical Legitimate Uses

Acetaldehyde* Perfumes, flavors, plastics, silver mirrors
Acetic acid* Food preservative, organic synthesis
Acetic anhydride* Organic synthesis, dehydrating agent

Acetone General solvent

Acetonitrile* Solvent, organic synthesis

Allylbenzene* None listed
Allylchloride* Organic synthesis
4 allyl 1,2 methylenedioxybenzene* None listed

Aluminum powder Paint additive, pyrotechnics, explosives, metal alloys

Aluminum chloride* Disinfectant, deodorant, wood preservative

Ammonia gas* Refrigerant, manufacture of nitric acid and explosives

Ammonium chloride* Batteries, electroplating, textiles
Ammonium formate* Inorganic metal analysis

Ammonium hydroxide* None listed

Ammonium nitrate Fertilizer, explosives, matches, pyrotechnics Aniline* Dyes, perfumes, varnishes, organic synthesis

Benzaldehyde* Dyes, perfumes, flavors

Barium chlorate Pyrotechnics, explosives, matches, dye processes
Barium nitrate Pyrotechnics, explosives, vacuum tube manufacture

Benzene* Pharmaceuticals, dyes, industrial solvent Benzyl chloride* Dyes, pharmaceuticals, perfumes, resins

Benzyl cyanide* None listed
Bromobenzene* Grignard reagent
Bromoethane* None listed

Carbon dioxide Beverage carbonation, fire extinguishers, dry ice Carbontetrachloride* Dry cleaning, fire extinguishers, general solvent Chloro-2-propanone* Intermediate for perfumes, drugs, insecticides,

photography

Copper oxide Ceramic and glass pigment, glass polishing

Copper sulfate Fungicide, photography, food additive, paint pigment

Chemical Legitimate Uses

Cyclohexanone* Industrial solvent
Dichloroethane* None listed
Ephedrine* Bronchodilators

Ergotamine tartrate* Treatment of migraine headaches

Ethyl acetate* Photo film, perfume, gun powder, dry cleaning

Formamide* Organic synthesis

Formic acid* Tanning, electroplating, wool dying Hydrazine Reducing agent, rocket fuel

Hydrobromic acid* Analytical reagent

Hydrochloric acid Pool chemical, masonry and metal cleaner, mining

Hydrogen Welding

Hydrogen peroxide*

Hydriodic acid*

Hydroxylamine HCl*

Italian

Rocket fuel, bleaching agent

Pharmaceuticals, disinfectants

Photography, antioxidant for soaps

Germicides and antiseptics, catalyst

Lithium metal*

Catalyst, metal alloys, batteries

Lithium aluminum hydride* Reducing agent
Lithium hydroxide Photographic developers

Magnesium metal Metal alloys, pyrotechnics, Grignard reagent
Mercuric chloride Preservative, photography, mining, steel etching
Mercury* Thermometers, switches, lighting, mining, dentistry
Methanol Solvent, antifreeze, gas additive, camping fuel

Methyl acrylate* Plastics and textiles
Methylamine* Tanning, organic synthesis

Nitric acid Manufacture of fertilizers, dyes, explosives, and a

variety of organic chemicals

Nitroethane Fuel additive, solvent
Perchloric acid* Metal plating, explosives

Phenylacetic acid* Perfumes

Phenylacetonitrile* Organic synthesis
Phenylmagnesium bromide* Organic synthesis

Phosphoric acid* Fertilizers, detergents, food additive, cleaning solvent

Phosphorous red* Pyrotechnics, matches, fertilizers, pesticides

Phosphorous pentachloride* Catalyst

Piperidine* Organic synthesis

Potassium carbonate Soap, glass, pottery, engraving, tanning

Potassium chlorate Explosives, pyrotechnics, matches, dye industry

Potassium chromate Leather tanning, rust-proofing metal Potassium cyanide Mining, electroplating, steel hardening

Potassium dichromate Leather tanning, dyes, paints, pyrotechnics, matches,

waterproofing fabrics

Potassium hydroxide Paint and varnish remover, photo engraving, printing

inks

Potassium iodide* Oxidizer for chemical analysis

Potassium nitrate Tempering steel, tobacco curing, glass manufacture,

explosives

Potassium perchlorate Explosives, pyrotechnics, photography

Pyridine* Solvent, organic synthesis

Chemical	Legitimate Uses
Raney nickel*	Catalyst
Sodium acetate	Photography, food additive
Sodium bicarbonate	Baking soda, fire extinguishers, cleaning compounds
Sodium bisulfite	Disinfectant, textile bleaching, food additive
Sodium hydroxide	Drain cleaner
Sodium metal*	Sodium compounds, sodium vapor lamps
Sodium nitrate*	Glass manufacturing, pottery, fertilizer, meat and tobacco preparation
Strontium nitrate	Pyrotechnics, road flares, matches
Sulfuric acid	Battery acid, drain cleaner, fertilizers, explosives
Tartaric acid	Food additive, photography, tanning, ceramics
Thorium nitrate*	Catalyst
Trifluoroacetic anhydride*	None listed
Zinc metal	Metal alloys, batteries, mining, printing plates, household utensils

^{*} No legitimate home or hobby use.