

BNL CHEMICAL STORAGE RECOMMENDATIONS

This information is adapted from published references for the most common chemicals at BNL. It presents well known compatibility and storage issues but is not an inclusive list of chemicals, hazards, or compatibility issues. For guidance on chemicals not listed on this table, consult the Material Safety Data Sheet, the BNL Chemical Hygiene Officer or your Environmental Safety & Health Representative.

The information provided in these tables is to serve as guidance for common work settings and may be modified as appropriate based on the quantity, container type, storage containment & safety apparatus, and work conditions.

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TABLE 1: BNL CHEMICAL STORAGE INFORMATION FOR COMPRESSED GASES IN CYLINDERS

Note: See the *Compressed Gas Cylinders and Related Systems* Subject Area for additional information and requirements.

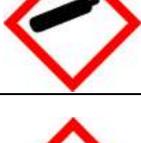
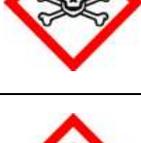
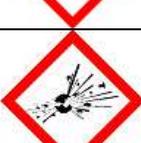
Type	Examples		Global Harmonization Symbol	Storage
CORROSIVE GASES	Ammonia, Nitric Oxide, Sulfur Dioxide			Can be stored with all other classes unless the gas has additional hazards (e.g., Flammable, Oxidizers)
FLAMMABLE GASES	Acetylene, Ammonia, Butane, Ethylene, Hydrogen, Hydrazine, Isobutane, Methane, Natural Gas, Propane, Carbon Monoxide, Ethylene Oxide, Hydrogen Sulfide			Do not store with Oxygen, Oxidizers, and Toxic Store acetylene upright
PYROPHORIC GASES (Ignites in Air)	Arsine, Diborane, Phosphine, Silane			Store in vented cabinet
NON-FLAMMABLE GASES	Air, Argon, Helium, Neon, Carbon Dioxide, Nitrogen			Can be stored with all other classes
HIGHLY TOXIC GASES (Poison Gas)	Arsine, Arsenic Pentafluoride, Bromine, Hydrogen Selenide, Perfluoroisobutylene, Phosgene, Oxygen Difluoride			Separate from Flammable and Pyrophoric gases
TOXIC GASES	Boron trifluoride, Hydrogen Fluoride, Hydrogen Cyanide, Hydrogen Sulfide, Nitric Oxide, Nitrogen Dioxide, Ozone			Separate from Flammable and Pyrophoric gases
OXIDIZING GASES	Bromine, Chlorine, Chlorine dioxide, Fluorine, Nitric Oxide; Oxygen			Do not store with Flammables, and Toxic
UNSTABLE (REACTIVE) GASES	Vinylfluoride; Butadiene; Chloroprene; Tetrafluoroethylene			

TABLE 2A: RECOMMENDED COLOR-CODING SYSTEM FOR SOLIDS AND LIQUIDS CONTAINER STORAGE

This system is adopted from SAF-T-DATA® labeling system (J. T. Baker/Avantor/ Macron).

Colors identify hazards and recommend storage groups.
 Segregation of chemicals into color-coded storage areas is recommended when practical.
 It is recommended to indicate the storage color code on containers of 250 ml or more.

Color Code	Hazard Group
	HEALTH HAZARD
 Blue	<ul style="list-style-type: none"> Store in secondary containment in a secure area.
 Blue Striped	<ul style="list-style-type: none"> Store individually in secondary containment in a secure area.
	FLAMMABLE HAZARD
 Red	<ul style="list-style-type: none"> Store in chemical resistant secondary containment in a flammable storage area or flammable cabinet.
 Red Striped	<ul style="list-style-type: none"> Store individually in chemical resistant secondary containment in a flammable storage area or flammable cabinet. Separate flammable solids from other classes.
	REACTIVITY/OXIDIZER HAZARD
 Yellow	<ul style="list-style-type: none"> Store in chemical resistant secondary containment isolated from organics, flammables and combustibles.
 Yellow Striped	<ul style="list-style-type: none"> Store individually in chemical resistant secondary containment isolated from organics, flammables and combustibles.
	CORROSIVE HAZARD
 White	<ul style="list-style-type: none"> Store in corrosion resistant secondary containment. Store acids away from bases.
 White Striped	<ul style="list-style-type: none"> Store individually in corrosion resistant secondary containment.
	LOW HAZARD
 Green	<ul style="list-style-type: none"> Store in General chemical storage area.
 Orange	<ul style="list-style-type: none"> Obsolete color that may be found on manufacturer labels on older containers. Replaced with Green.

TABLE 2B: BNL CHEMICAL STORAGE INFORMATION FOR CONTAINERS OF SOLIDS AND LIQUIDS

This information is adapted from published references for the most common chemicals at BNL. It presents well known compatibility and storage issues but is not an inclusive list of chemicals, hazards, or compatibility issues. For guidance on chemicals not listed on this table, consult the Material Safety Data Sheet, Chemical Hygiene Officer or your Environmental Safety & Health Representative.

(Key: pale blue background indicates a General chemical storage chemical class; a white background indicates a specific chemical).

General chemical storage precaution for all chemicals: Separate from incompatibles. For most, keep container above freezing, unless refrigeration or cold storage is indicated.

	Chemical	Chemical Hazard and Storage Information	Storage Color	H/F/S Rating
1.	Acetic Acid Glacial (99.5 - 100%)	Hazards: Flammable, Corrosive, Toxic Conditions for Storage: General chemical storage Avoid storage with: Inorganic acids, alcohol, amines, ammonia, bases, caustics (strong), hydroxyl compounds, ketones, oxidizers (strong), peroxides, phenols	Red 	3/2/0
2.	Acetone	Hazards: Flammable, Toxic Conditions for Storage: General chemical storage Avoid storage with: nitric acid, sulfuric acid, oxidizing materials, chloroform, alkalis, chlorine compounds, acids, potassium t-butoxide.	Red 	1/3/0
3.	Acetonitrile	Hazard: Flammable, Toxic Conditions for Storage: Store away from any area where the fire hazard may be acute. Outside or detached storage is preferred. Avoid storage with: oxidizing materials, sulfuric acid, oleum, chlorosulfonic acid, n-fluoro compounds, nitrating agents, perchlorates.	Red 	2/3/0
4.	Acids, Organic	Examples: Carboxylic acids: Benzoic acid, Citric acid, Formic acid, Lactic acid, Oxalic acid, Uric acid Hazards: Corrosive Conditions for Storage: Can be stored with organic solvents. Avoid storage with: Flammables, inorganic acids, alkalis, oxidizers, organic peroxide, water reactive	Green 	-/-
5.	Acids, Inorganic (non-oxidizing)	Examples: Hydrochloric acid, Hydroiodic acid, Hydrobromic acid, Hydrofluoric acid, Phosphoric acid. Hazards: Corrosive Conditions for Storage: Can be stored with Oxidizing Acids, Oxidizers Avoid storage with: Alkalis, organics, organic acids, water reactive, reactive metals, ammonia, nitric acid, perchloric acid	White 	

	Chemical	Chemical Hazard and Storage Information	Storage Color	H/F/S Rating
6.	Acids, Inorganic (oxidizing)	<p>Examples: Sulfuric acid, perchloric acid, arsenic acid, chlorosulfonic acid, chromic acid, fluorosulfonic acid, chloric acid, nitrosulfuric acid, selenic acid.</p> <p>Hazard: Corrosive, non-flammable</p> <p>Conditions for Storage: Can be stored with non-oxidizing inorganic acids, oxidizers</p> <p>Avoid storage with:</p>	White 	
7.	Acrylamide, Bis-	<p>Hazard: Toxic, Explosive/Unstable</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: reactive or combustible materials, oxidizing materials and peroxides, alkalies, acids. Spontaneously reacts with hydroxyl-, amino-, and sulfhydryl- containing compounds.</p>	Yellow Stripe 	2/2/2
8.	Alkalis (bases, caustic, corrosive)	<p>Examples: Ammonium hydroxide, Calcium Hydroxide</p> <p>Hazards: Corrosive</p> <p>Conditions for Storage: Can be stored with Organic compounds, Flammable Liquids, Oxidizers</p> <p>Avoid storage with: Flammable solids, organic acids, inorganic acids, organic peroxide, water reactive, metals, explosives</p>	White 	
9.	Ammonium Acetate	<p>Hazard: Irritant</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: Sodium Hypochlorite, strong acids.</p>	Green 	1/1/0
10.	Ammonium Chloride	<p>Hazard: Irritant</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: Concentrated acids, strong bases, silver salts, potassium chlorate, ammonium nitrate, bromine trifluoride and iodine heptafluoride. Ammonium chloride reacts explosively with potassium chlorate or bromine trifluoride, and violently with bromine pentafluoride, ammonium compounds, nitrates, and iodine heptafluoride. Explosive nitrogen trichloride may result from reaction of ammonium chloride and hydrogen cyanide.</p>	Green 	2/0/0
11.	Ammonium hydroxide (21-72% in water)	<p>Hazards: Corrosive, Toxin</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: Acids, acrolein, combustibles, dimethyl sulfate, halogens, silver nitrate, propylene oxide, nitromethane, silver oxide, silver permanganate, oleum, beta-propiolactone. Most common metals.</p>	White Stripe 	3/1/0

	Chemical	Chemical Hazard and Storage Information	Storage Color	H/F/S Rating
12.	Ammonium Nitrate	<p>Hazards: Strong oxidizer, Explosive, Irritant</p> <p>Conditions for Storage: General chemical storage, do not store above 130 degrees F.</p> <p>Avoid storage with: acids, alkalis, reducing agents, and combustible materials Aluminum, antimony, chromium, copper, iron, lead, magnesium, manganese, nickel, zinc, brass, oil, charcoal, organic material, acetic acid, ammonium chloride, bismuth, cadmium, chlorides, cobalt, phosphorus, potassium and ammonium sulfate, sodium, sodium hypochlorite, sodium perchlorate, sodium-potassium alloy, and sulfur.</p>	Yellow 	0/0/0 OXY
13.	Ammonium Persulfate	<p>Hazard: Oxidizer, Irritant, Allergenic</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: combustibles, organics, other readily oxidizable materials, reducing agents, organic material, sodium peroxide, water and powdered metals especially aluminum.</p>	Yellow 	2/0/1 OXY
14.	Ammonium Sulfate	<p>Hazard: Irritant</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: Sodium hypochlorite, potassium plus ammonium nitrate, potassium chlorate, potassium nitrite, and sodium-potassium powder plus ammonium nitrate, and other strong oxidizers.</p>	Green 	1/0/1
15.	Aniline	<p>Hazards: Combustible, Toxic (Poison)</p> <p>Conditions for Storage: General chemical storage; outside or detached storage is preferred. Separate from incompatibles. Containers should be bonded and grounded for transfers to avoid static sparks.</p> <p>Avoid storage with: Strong acids and strong oxidizers, albumin, solutions of iron, zinc, aluminum, toluene diisocyanate, and alkalis. Ignites spontaneously in the presence of red fuming nitric acid, and with sodium.</p>	Red 	3/2/0
16.	Arsenic trioxide (white arsenic)	<p>Hazards: Toxic (Carcinogen)</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: Oxidizers, tannic acid, infusion cinchona and other vegetable astringent infusions and decoctions, iron solutions, rubidium carbide, chlorine trifluoride, fluorine, hydrogen fluoride, oxygen difluoride, acids, bases, sodium chlorate, zinc filings, other reactive metals and mercury.</p>	Blue 	3/0/0
17.	Ascorbic Acid	<p>Hazards: low hazard</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: Strong oxidizers and alkali hydroxides, alkalis, iron, copper, sodium salicylate, sodium nitrite, theobromine and methenamine</p>	Green 	1/0/0
18.	Benzene	<p>Hazards: Flammable, Toxic</p> <p>Conditions for Storage: Store separately in liquid storage room or cabinet.</p> <p>Avoid storage with: oxidizing materials, bromine pentafluoride, bromine trifluoride, chlorine, chromium trioxide, dioxygen difluoride, dioxygenyl tetrafluoroborate, iodine heptafluoride, iodine pentafluoride, nc104, nitric acid,</p>	Red Striped 	4/3/2

	Chemical	Chemical Hazard and Storage Information	Storage Color	H/F/S Rating
		nitryl perchlorate, oxidizing materials, ozone, perchlorates, permanganic acid, peroxodisulfuric acid, peroxomonosulfuric acid, potassium dioxide, silver perchlorate, sodium peroxide, uranium hexafluoride		
19.	Boric Acid	<p>Hazards: Toxic</p> <p>Conditions for Storage: General chemical storage.</p> <p>Avoid storage with: Potassium, acetic anhydride, alkalis, carbonates, and hydroxides.</p>	Green 	1/0/0
20.	Bromine	<p>Hazards: Corrosive, Oxidizer, Toxic</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: Attacks most metals, reacting violently with aluminum, titanium, mercury, and potassium. Incompatible with reducing agents, combustibles, and many organic chemicals.</p>	White Stripe 	4/0/0 Ox
21.	Butanol, 1- (n-butyl alcohol)	<p>Hazards: Flammable, Toxic</p> <p>Conditions for Storage: General chemical storage. Outside or detached storage is preferred.</p> <p>Avoid storage with: Strong oxidizers, strong mineral acids, halogens, aluminum, chromium trioxide, alkali metals.</p>	Red 	1/3/0
22.	Calcium carbonate	<p>Hazards: Irritant</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: Acids, fluorine, magnesium with hydrogen.</p>	Green 	0/0/0
23.	Calcium Chloride	<p>Hazards: Irritant</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: Methyl vinyl ether, water, zinc, bromine trifluoride, mixtures of lime and boric acid, barium chloride, and 2-furan percarboxylic acid.</p>	Green 	1/0/1
24.	Calcium Oxide	<p>Hazards: Corrosive.</p> <p>Conditions for Storage: General chemical storage. May swell and generate heat when moistened and could burst container.</p> <p>Avoid storage with: Water, acids, humid air, hydrogen fluoride, phosphorous pentoxide, boric oxide, steam, many organic substances.</p>	Green 	1/0/1
25.	Calcium sulfate	<p>Hazards: Irritant</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: Diazomethane, aluminum, phosphorous.</p>	Green 	1/0/0

	Chemical	Chemical Hazard and Storage Information	Storage Color	H/F/S Rating
26.	Carbon Tetrachloride	<p>Hazards: Toxic, nonflammable</p> <p>Conditions for Storage: Attacks some plastics, coatings and rubber. Appropriate containers include glass, cans, and drums made of metal that are not susceptible to hydrochloric acid.</p> <p>Avoid storage with: Alkali metals, sodium metal, potassium metal, chemically active metals, strong oxidizing agents, allyl alcohol, dimethyl formamide, fluorine, strong bases</p>	Blue 	3/0/1
27.	Cesium chloride	<p>Hazards: Low hazard</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: Boron trifluoride</p>	Green 	0/0/0
28.	Chloroacetic Acid	<p>Hazards: Corrosive, Toxic</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: Alkalies, alcohols, metals, oxidizing materials, reducing agents and metals.</p>	White 	3/1/1
29.	Chloroform (Trichloromethane)	<p>Hazards: Toxic.</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: alkali (strong), strong mineral acids. aluminum, chemically active metals, dinitrogen tetraoxide, disilane, fluorine, lithium, magnesium, magnesium powder, metals, nitrogen tetroxide, potassium, potassium-tert-butoxide, sodium, sodium hydride, sodium methylate, sodium-potassium alloy, triisopropylphosphine.</p>	Blue 	2/0/0
30.	Chrome etch	<p>Mix of: Nitric acid, cerium ammonium nitrate & chromium</p> <p>Hazards: Corrosive, Oxidizer</p> <p>Conditions for Storage: General chemical storage. Can be stored with Organic Acids, Oxidizers</p> <p>Avoid storage with: Organics, acetic acid, naphthalene, camphor, glycerol, glycerin, turpentine, alcohol, flammable liquids</p>	White 	
31.	Chromium trioxide Chromic Acid	<p>Hazards: Corrosive, Oxidizer, Toxic.</p> <p>Conditions for Storage: General chemical storage.</p> <p>Avoid storage with: organic or other readily oxidizable material, sulfur, arsenic, ammonia gas, hydrogen sulfide, phosphorus potassium, sodium, selenium, combustible materials, halogens, sulfides, metals, acetic acid, acetone, alcohols, aluminum.</p>	White 	3/0/0 OXY
32.	Citric Acid	<p>Hazards: Irritant</p> <p>Conditions for Storage: General chemical storage.</p> <p>Avoid storage with: Metal nitrates (potentially explosive reaction), alkali carbonates and bicarbonates, potassium tartrate.</p>	Green 	2/1/0

	Chemical	Chemical Hazard and Storage Information	Storage Color	H/F/S Rating
33.	Cupric Sulfate	<p>Hazards: Toxic</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: hydroxylamine, magnesium, acetylene</p>	Green 	2/0/0
34.	Cyclohexane	<p>Hazards: Flammable, Toxic</p> <p>Conditions for Storage: General chemical storage. Outside or detached storage is preferred.</p> <p>Avoid storage with: Strong oxidizers</p>	Red 	1/3/0
35.	Dimethyl Acetamide, N,N-	<p>Hazards: Flammable, Toxic</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: Carbon tetrachloride, oxidizing agents, halogenated compounds, iron plus halogenated compounds.</p>	Red 	2/2/0
36.	Dimethyl Sulfoxide	<p>Hazards: Combustible, Toxic</p> <p>Conditions for Storage: Store in airtight container (not plastic) and protect from moisture and light. Store in a cool, dry, ventilated area away from sources of heat or ignition.</p> <p>Avoid storage with: Strong oxidants, acylhalides, arylhalides, bromobenzoyl acetanilide, magnesium perchlorate, perchloric acid and sodium hydroxide.</p>	Red 	1/1/0
37.	Dimethylformamide N,N-	<p>Hazards: Flammable, Toxic</p> <p>Conditions for Storage: General chemical storage. Outside or detached storage is preferred.</p> <p>Avoid storage with: Bromine, carbon tetrachloride, chromic anhydride, 2,5-dimethylpyrrole, phosphorus oxychloride, hexachlorobenzene, magnesium nitrate, methylene diisocyanate, phosphorus trioxide, triethyl aluminum, organic nitrates, acidic and alkaline materials, halogenated compounds, iron, strong oxidizers, alkyl aluminums, Methylene diisocyanate</p>	Red 	2/2/0
38.	Ethyl Acetate	<p>Hazards: Flammable, Toxic</p> <p>Conditions for Storage: General chemical storage.</p> <p>Avoid storage with: Acids, alkalis, chlorosulfonic acid, lithium tetrahydroaluminate, nitrates, oleum, oxidizing materials, potassium <i>tert</i>-butoxide.</p>	Red 	1/3/0
39.	Ethyl Alcohol	<p>Hazards: Flammable, Toxic</p> <p>Conditions for Storage: General chemical storage.</p> <p>Avoid storage with: Strong oxidants, silver salts, acid chlorides, alkali metals, metal hydrides, hydrazine, and many other substances.</p>	Red 	1/3/0

	Chemical	Chemical Hazard and Storage Information	Storage Color	H/F/S Rating
40.	Ethyl Ether (Diethyl ether)	Hazards: Flammable, Toxic Conditions for Storage: Segregate as a Peroxide Forming compound. Peroxide formation is likely to occur whenever containers have been opened and remain in storage for more than six months. Avoid storage with: acetyl peroxide, liquid oxygen, bromoazide, chlorine, and strong oxidizers such as nitrates.	Red 	2/4/1
41.	Ethylene diamine tetra Acetic Acid (EDTA)	Hazards: Low toxicity Conditions for Storage: General chemical storage Avoid storage with: Oxidizing agents.	Green 	1/0/0
42.	Ethylene diamine tetra acetic acid disodium salt dihydrate (EDTA Na Salt)	Hazards: Mild Irritant Conditions for Storage: General chemical storage Avoid storage with: Oxidizing agents.	Green 	1/0/0
43.	Ethylene Glycol	Hazards: Toxic, Allergenic Conditions for Storage: General chemical storage Avoid storage with: acids, strong oxidizing agents, chlorosulfonic acid, oleum, sulfuric acid, perchloric acid, chromium trioxide, potassium permanganate, sodium peroxide, ammonium dichromate, silver chlorate, sodium chloride, uranyl nitrate.	Green 	1/1/0
44.	Flammable liquids	Hazards: flammable Conditions for Storage: Store in a Flammable storage cabinet. Avoid storage with: Ammonium nitrate, chromic acid, halogens, hydrogen peroxide, nitric acid, sodium peroxide oxidizers, poisonous liquids	Red 	-/4/-
45.	Flammable solids	Hazards: flammable Conditions for Storage: Store in a Flammable storage cabinet. Avoid storage with: Poisonous liquids, corrosive liquids	Red 	-/4/-
46.	Formaldehyde	Hazards: Flammable/combustible, Toxic, Corrosive. Conditions for Storage: General chemical storage Avoid storage with: oxidizing materials, alkalis, acids, hydrogen peroxide, magnesium carbonate, nitromethane, oxides of nitrogen, oxidizers, performic acid, phenols, urea	Red 	3/2/0
47.	Formic Acid	Hazards: Corrosive, Combustible Conditions for Storage: General chemical storage Avoid storage with: oxidizing materials, alkalis, caustics (strong), chromic acid, furfuryl alcohol, hydrogen peroxide, nitric acid, nitromethane, oxidizing materials, peroxides, p2o5, sulfuric acid (conc.), thallium nitrate	Red 	3/2/0

	Chemical	Chemical Hazard and Storage Information	Storage Color	H/F/S Rating
48.	Glutamine	<p>Hazards: low hazard</p> <p>Conditions for Storage: General chemical storage.</p> <p>Avoid storage with: No information found.</p>	Green 	0/0/0
49.	Glycerol	<p>Hazards: Irritant, low toxicity</p> <p>Conditions for Storage: Glycerin is hygroscopic and may also absorb hydrogen sulfide, hydrogen cyanide, and sulfur dioxide.</p> <p>Avoid storage with: Acetic anhydride, calcium hypochlorite, chlorine, chromium trioxide, hydrogen peroxide, phosphorus triiodide, potassium chlorate, potassium permanganate, potassium peroxide, silver perchlorate, sodium hydride, sodium peroxide</p>	Green 	1/1/0
50.	Glycine	<p>Hazards: low hazard</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: No incompatibility data found.</p>	Green 	0/1/0
51.	Heptane	<p>Hazards: Flammable, Toxic</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: Strong oxidizers.</p>	Red 	1/3/0
52.	Hexane	<p>Hazards: Flammable, Toxic</p> <p>Conditions for Storage: Store in tightly closed containers (preferably under nitrogen atmosphere) in a standard Flammable liquids storage room or cabinet.</p> <p>Avoid storage with: Strong oxidizers.</p>	Red 	1/3/0
53.	Hydriodic Acid	<p>Hazards: Corrosive, Toxic</p> <p>Conditions for Storage: Keep in a tightly closed container.</p> <p>Avoid storage with: Strong oxidizers, alkalis, fluorine, potassium, nitric acid, some metals, water, and steam.</p>	White 	3/0/0
54.	Hydrobromic Acid (47-49%) (Hydrogen Bromide)	<p>Hazards: Corrosive, Toxic</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: Fluorine gas, ammonia, combustible materials, ozone, ferric oxide, alkalis, metals and strong oxidizing agents.</p>	White 	3/0/0
55.	Hydrochloric Acid (33- 40%) (Hydrogen Chloride)	<p>Hazards: Corrosive, Toxic</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: oxidizing materials, organic materials, alkalis, metals, metal oxides, hydroxides, amines, carbonates and other alkaline materials. Incompatible with materials such as cyanides, sulfides, sulfites, and formaldehyde.</p>	White 	3/0/1

	Chemical	Chemical Hazard and Storage Information	Storage Color	H/F/S Rating
56.	Hydrocyanic acid (Prussic Acid)	Hazards: Explosive, Toxic Conditions for Storage: Shelf life not to exceed 90 days or as otherwise specified by the manufacturer. Avoid storage with: Acetaldehyde, Acids or acid fumes, Air, Amines, Bases, Caustics, Water or Steam.	White 	
57.	Hydrofluoric Acid (Hydrogen Fluoride)	Hazards: Corrosive, Toxic Conditions for Storage: Keep in tightly closed polyethylene containers. Store in a cool, dry place with adequate ventilation separated from other chemicals. Avoid storage with: arsenic trioxide, phosphorus pentoxide, ammonia, calcium oxide, sodium hydroxide, sulfuric acid, vinyl acetate, ethylenediamine, acetic anhydride, alkalis, organic materials, most common metals, rubber, leather, water, strong bases, carbonates, sulfides, cyanides, oxides of silicon, especially glass, concrete, silica, fluorine, steam, water.	White Stripe BNL 	4/0/1
58.	Hydrogen Peroxide (3% U.S.P.)	Hazards: Corrosive. Oxidizer, Toxic Conditions for Storage: Store in a cool (< 35C), well-ventilated dark area separated from other chemicals. Containers must be vented, but check periodically for bulging containers which can burst from pressure. Avoid storage with: reducing agents, organics, reducing agents, alkalis, many metals, combustible substances, flammable materials.	Green 	1/0/1
59.	Hydrogen Peroxide (30%)	Hazards: Corrosive. Oxidizer, Toxic Conditions for Storage: Store in a cool (< 35C), well-ventilated dark area separated from other chemicals. Containers must be vented, but check periodically for bulging containers which can burst from pressure. Avoid storage with: reducing agents, organics, reducing agents, alkalis, many metals, combustible substances, flammable materials.	White 	3/0/1 OXY
60.	Imidazole	Hazards: Corrosive Conditions for Storage: General chemical storage Avoid storage with: Strong oxidizers	White 	3/1/0
61.	Iodine	Hazards: Corrosive, Oxidizer, Toxic Conditions for Storage: General chemical storage Avoid storage with: ammonia, powdered metals, alkali metals, or strong reducing agents, acetaldehyde, acetylene, ammonium hydroxide.	White 	3/1/0 OXY
62.	Iron Chloride (Ferric Chloride)	Hazards: Corrosive Conditions for Storage: General chemical storage Avoid storage with: Metals, allyl chloride, sodium, potassium. Will react with water to produce toxic and corrosive fumes.	White 	2/0/0

	Chemical	Chemical Hazard and Storage Information	Storage Color	H/F/S Rating
63.	Iron Sulfate (Ferrous sulfate)	Hazards: Toxic Conditions for Storage: General chemical storage. Maintain a constant temperature not to exceed 24°C (75F). Fluctuating temperatures cause product oxidation. Do not use this product if coated with brownish-yellow basic ferric sulfate. Avoid storage with: Alkalis, soluble carbonates, and oxidizing materials. Reacts in moist air to form ferric sulfate.	Green 	1/0/0
64.	Isopropyl Alcohol (2-Propanol) (sec-Propyl Alcohol)	Hazards: Flammable, Toxic. Conditions for Storage: Store in tightly closed containers (preferably under nitrogen atmosphere) in a standard Flammable liquids storage room or cabinet. Avoid storage with: strong oxidizers, acetaldehyde, acids, chlorine, ethylene oxide, hydrogen-palladium combination, hydrogen peroxide-sulfuric acid combination, potassium tert-butoxide, hypochlorous acid, isocyanates, nitroform, phosgene, aluminum, oleum and perchloric acid.	Red 	1/3/0
65.	Magnesium chloride	Hazards: low toxicity Conditions for Storage: General chemical storage Avoid storage with: Furan-2-peroxycarboxylic acid.	Green 	1/0/0
66.	Magnesium sulfate	Hazards: Irritant Conditions for Storage: General chemical storage Avoid storage with: Ethoxy ethyl alcohols, arsenates, phosphates, tartrates, lead, barium, strontium, and calcium	Green 	1/0/0
67.	Mercury	Hazards: Corrosive, Toxic Conditions for Storage: Store in small quantities in polyethylene bottles. To prevent evaporation, cover surface with water. Keep containers closed. At ordinary temperatures mercury is slightly volatile. Ambient storage is recommended. Avoid storage with: Acetylenes, ammonia, ethylene oxide, chlorine dioxide, azides, metal oxides, methyl silane, lithium, rubidium, oxygen, strong oxidants, metal carbonyls	White 	3/0/0
68.	Metals, Reactive (alkali)	Examples: Sodium, Potassium, Magnesium Hazards: Flammable, Corrosive, Toxic Conditions for Storage: Keep away from water. Avoid high temperatures. Store under nitrogen or kerosene. Never store under halogenated hydrocarbons. Avoid storage with: Water, air, acids, oxidizing materials, oxygen, carbon dioxide, carbon tetrachloride, halogens, acetylene, metal halides, ammonium salts, oxides, oxidizing agents, acids, alcohols, chlorinated organic compounds, many other substances	Red Stripe 	-/4/-

	Chemical	Chemical Hazard and Storage Information	Storage Color	H/F/S Rating
69.	Methanol	<p>Hazards: Flammable , Toxin</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: Strong oxidizing agents such as nitrates, perchlorates or sulfuric acid.</p>	Red 	1/3/0
70.	Methyl Ethyl Ketone	<p>Hazards: Flammable, Toxic</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: Oxidizing materials, caustics, amines, ammonia, strong bases, chloroform, chlorosulfonic acid, oleum, potassium-t-butoxide, heat or flame, hydrogen peroxide, nitric acid.</p>	Red 	1/3/0
71.	Methylbutan-1-ol, 3- (Methyl-1-butanol, 3-) (iso-Pentyl alcohol)	<p>Hazards: Combustible, Toxic</p> <p>Conditions for Storage: General chemical storage.</p> <p>Avoid storage with: strong oxidizers, reducing agents, hydrogen trisulfide.</p>	Red 	1/2/0
72.	Methylene Chloride	<p>Hazards: Toxic</p> <p>Conditions for Storage: Store in a ventilated cabinet or fume hood. Keep containers tightly closed.</p> <p>Avoid storage with: Caustics, dinitrogen tetroxide, lithium, magnesium powder, metals (chemically active), methanol vapors, oxidizers (strong), oxygen (high content atmospheres), oxygen (liquid), potassium, potassium <i>tert</i>-butoxide, sodium, sodium-potassium alloy.</p>	Blue 	2/1/0
73.	Morpholino ethane sulfonic acid, 2, 4- (MES)	<p>Hazards: May be Toxic (unknown)</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: Strong oxidizers.</p>	Green 	1/1/0
74.	Nitrates	<p>Hazards: Explosive</p> <p>Conditions for Storage: Nitrates should be considered storage hazards.</p> <p>Avoid storage with: Aluminum, boron phosphide, cyanide, esters, phosphorus, pn2h, reducing materials, sodium cyanide, sodium hypophosphite, strontium chloride, thiocyanates.</p>	Yellow 	-/3
75.	Nitric Acid (50-70%) (Aqua Fortis)	<p>Hazards: Corrosive, Oxidizer, Toxic</p> <p>Conditions for Storage: Store in a separate secondary container, separated from all other acids and chemicals. Do not store in polyethylene or polypropylene plastic containers.</p> <p>Avoid storage with: alkalis, organics, oxidizers, metallic powders, carbides, hydrogen sulfide, turpentine, and combustible organics.</p>	White Stripe BNL 	3/0/0 OXY

	Chemical	Chemical Hazard and Storage Information	Storage Color	H/F/S Rating
76.	Organic Peroxides	<p>Hazards: Corrosive, Oxidizer, Toxic</p> <p>Conditions for Storage: Store in a cool (< 35C), well-ventilated dark area. Do not store on wooden shelves or floors. Containers must be vented, but check periodically for bulging containers which can burst from pressure. Glass, polyethylene, stainless steel and aluminum are recommended materials for storage containers.</p> <p>Avoid storage with: combustible substances, reducing agents, organics, alkalis, many metals, flammable materials.</p>	White 	
77.	Oxalic Acid	<p>Hazards: Corrosive, Irritant</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: Furfuryl alcohol, mercury, oxidizers (strong), silver, sodium chlorite, sodium hypochlorite.</p>	White 	3/1/0
78.	Para formaldehyde	<p>Hazards: Combustible, Toxic</p> <p>Conditions for Storage: Store in a standard Flammable liquids storage room or cabinet.</p> <p>Avoid storage with: Caustics, strong alkalis, oxidizing materials, isocyanates, anhydrides, oxides and inorganic acids.</p>	Red 	3/1/0
79.	Peracetic Acid (Peroxyacetic acid)	<p>Hazards: Unstable. Flammable, Organic peroxide, explosion</p> <p>Conditions for Storage: Normally kept refrigerated.</p> <p>Avoid storage with: acids, alkalis, organic materials, heavy metals, acetic anhydride, calcium chloride, 5-p-chlorophenyl-2,2-dimethyl-3-hexanone, combustible materials, diethyl ether, ether solvents, metal chloride solutions, olefins, organic materials, potassium chloride, sodium chloride, tetrahydrofuran.</p>	White BNL 	3/0/1 OXY
80.	Perchloric Acid (60-70%)	<p>Hazards: Corrosive. Oxidizer, Explosion hazard.</p> <p>Conditions for Storage: Keep in a heavy glass tray with larger capacity.. Store where it will not freeze (freezing point about -4F).</p> <p>Avoid storage with: combustible materials, organic chemicals, strong dehydrating agents, reducing and oxidizing agents. Reacts violently with benzene, calcium hydride, wood, acetic acid, charcoal, olefins, ethanol, sulfur and sulfuric acid.</p>	White 	3/0/3 OXY
81.	Peroxide-Forming Chemicals	<p>Hazards: Explosive</p> <p>Conditions for Storage: Segregate in area away from other chemicals. Following requirements on date labeling and peroxide testing.</p> <p>Avoid storage with: Alkalis, Oxidizers, Inorganic acids, [Phosphorus (white), Air, Oxygen, Reducing agents</p>	Yellow 	-/-/-
82.	Phenol	<p>Hazards: Combustible, Corrosive, Toxic</p> <p>Conditions for Storage: Store in tightly closed containers.</p> <p>Avoid storage with: Acids (strong), acute fire hazards, aliphatic amines, aluminum chloride, amides, butadiene, calcium hypochlorite, caustics, formaldehyde, oxidizing materials, peroxydisulfuric acid, peroxymonosulfuric acid</p>	White Stripe 	4/2/0

	Chemical	Chemical Hazard and Storage Information	Storage Color	H/F/S Rating
83.	Phosphoric Acid	<p>Hazards: Corrosive.</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: Caustics, nitromethane, sodium tetrahydroborate, alkalies and most metals.</p>	White 	3/0/0
84.	Phosphorus (White, Yellow)	<p>Hazards: Pyrophoric. Toxic.</p> <p>Conditions for Storage: Separate from air, oxidizing materials, combustibles. Always keep container closed, with material under water or inert gas.</p> <p>Avoid storage with: strong oxidizing agents, strong bases.</p>	Red 	-/-/ WATER REACTIVE
85.	Phosphorus (red)	<p>Hazards: Flammable Solid, Irritant</p> <p>Conditions for Storage: Separate from air, oxidizing materials, combustibles. Always keep container closed, with material under water or inert gas.</p> <p>Avoid storage with: Halogens, halides, sulfur, oxidizing materials, alkalis.</p>	Red 	1/1/1
86.	Phosphorus Pentoxide	<p>Hazards: Corrosive, Toxic</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: Ammonia, calcium oxide, chlorine trifluoride, hydrogen fluoride, flammables, oxygen difluoride, perchloric acid, perchloric acid and chloroform, potassium, propargyl alcohol, sodium, sodium carbonate, sodium hydroxide, water, mixture of water and organic material.</p>	White 	3/1/3 WATER REACTIVE
87.	Picric Acid (Trinitrophenol, 2,4,6-)	<p>Hazards: Explosive, Flammable, Toxic</p> <p>Conditions for Storage: Store in glass (not metal) containers and wet screw tops before sealing. Keep moist (at least 10% water). Do not store on concrete floors.</p> <p>Avoid storage with: Metals including copper, lead, and zinc, ammonia, concrete (forms explosive salts), plaster, salts, oxidizers, gelatin, alkaloids.</p>	Red 	3/3/4
88.	Pirahna Etch (acidic)	<p>Sulfuric Acid with hydrogen peroxide (3:1)</p> <p>Hazards: Corrosive</p> <p>Conditions for Storage: Store with vented cap in polymer coated acid storage bottle. Can be stored with Organic Acids, Oxidizer.</p> <p>Avoid storage with: Organics</p>	White 	
89.	Pirahna Etch (basic)	<p>Ammonium hydroxide with hydrogen peroxide (3:1)</p> <p>Hazards: Corrosive</p> <p>Conditions for Storage: Store with vented cap in polymer coated acid storage bottle. Can be stored with Alkalis.</p> <p>Avoid storage with: Organics</p>	White 	

	Chemical	Chemical Hazard and Storage Information	Storage Color	H/F/S Rating
90.	Poisonous Liquids	<p>Hazards: Toxic</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: flammable liquids, flammable solids, spontaneously combustible liquids, dangerous when wet materials, oxidizers, organic peroxides</p>	Blue 	3/-/-
91.	Polyacryl amide	<p>Hazards: Toxic</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: oxidizing and reducing agents, brass, aluminum</p>	Green BNL 	-/-/-
92.	Polyethylene Glycol Octaphenol Ether (Octyl Phenol Ethoxylate)	<p>Hazards: Irritation</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: Strong oxidizers, strong acids and strong bases. Corrosive to copper and brass.</p>	Green 	2/1/0
93.	Potassium acetate	<p>Hazards: low hazard</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: Strong oxidizing agents.</p>	Green 	1/0/0
94.	Potassium Amide 17242-52-2	<p>Hazards: Peroxide forming, corrosive</p> <p>Condition for storage: Segregate with peroxide forming compounds. Hazardous on exposure to air.</p> <p>Avoid storage with: Oxidizing agents, acids, oxygen and halogenated organics</p>	Yellow Stripe BNL 	3/-/- WATER REACTIVE
95.	Potassium bromide	<p>Hazards: Toxic</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: Strong oxidizers, acids, and bromine trifluoride</p>	Green 	2/0/0
96.	Potassium Carbonate	<p>Hazards: Irritant</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: Acids, chlorine trifluoride, magnesium. An explosion occurred after mixing sodium hydrosulfite, aluminum powder, potassium carbonate and benzaldehyde.</p>	Green 	2/0/0
97.	Potassium Chlorate	<p>Hazards: Oxidizer, Toxic</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: Iodides, tartaric acid, aluminum, sulfuric acid, hypophosphite, powdered metals, organic matter and many other oxidizable substances.</p>	Yellow 	2/0/3 OXY

	Chemical	Chemical Hazard and Storage Information	Storage Color	H/F/S Rating
98.	Potassium Chloride	<p>Hazards: Toxic</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: Bromine trifluoride, potassium permanganate plus sulfuric acid.</p>	Green 	1/0/0
99.	Potassium Cyanide	<p>Hazards: Corrosive, Toxic</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: Strong acids, strong oxidizers, water or weak alkaline solutions, carbon dioxide.</p>	Blue 	3/0/0
100	Potassium Hydroxide	<p>Hazards: Corrosive, Toxic</p> <p>Conditions for Storage: Store separately. Protect from moisture. Water releases heat which can result in violent boiling and spattering.</p> <p>Avoid storage with: water, acids, flammable liquids, organic halogen compounds, trichloroethylene, nitromethane and other similar nitro compounds, aluminum, tin and zinc.</p>	White Stripe 	3/0/1
101	Potassium iodide	<p>Hazards: Irritant</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: Diazonium salts, diisopropyl peroxydicarbonate, oxidants, bromine and chlorine trifluorides, fluorine perchlorate, calomel (mercurous chloride), potassium chlorate, metallic salts, tartaric and other acids.</p>	Green 	1/0/0
102	Potassium Nitrate	<p>Hazards: Oxidizer, Toxic</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: Heavy metals, phosphites, organic compounds, carbonaceous materials, strong acids, combustibles, organic or other readily oxidizable materials.</p>	Yellow 	1/0/0 OXY
103	Potassium Perchlorate	<p>Hazards: Oxidizer, Toxic</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: Aluminum, magnesium, charcoal, fluorine, sulfur, many combustible substances and reducing agents.</p>	Yellow 	2/0/3 OXY
104	Potassium Permanganate	<p>Hazards: Corrosive, Oxidizer</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: Powdered metals, alcohol, arsenites, bromides, iodides, phosphorous, sulfuric acid, organic compounds, sulfur, activated carbon, hydrides, strong hydrogen peroxide, ferrous or mercurous salts, hypophosphites, hyposulfites, sulfites, peroxides, and oxalates, combustibles, organic or other readily oxidizable materials.</p>	Yellow 	1/0/0 OXY
105	Potassium phosphate	<p>Hazards: Mild Toxin/Irritant</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: No incompatibility data found.</p>	Green 	1/0/0

	Chemical	Chemical Hazard and Storage Information	Storage Color	H/F/S Rating
106	Propanol (n-propyl alcohol)	Hazards: Flammable, Toxic Conditions for Storage: General chemical storage Avoid storage with: Strong acids, aldehydes, halides, halogens, potassium-tert-butoxide, oxidizing materials.	Red 	1/3/0
107	Pyridine	Hazards: Flammable, Toxic Conditions for Storage: General chemical storage Avoid storage with: maleic anhydride, perchromates, strong acids, strong oxidizers.	Red 	3/3/0
108	Sodium acetate	Hazards: Irritant Conditions for Storage: General chemical storage Avoid storage with: Nitric acid, fluoride, potassium nitrate, strong oxidizers and diketene.	Green 	1/1/0
109	Sodium Amide 7782-92-5	Hazards: Peroxide forming, corrosive Condition for storage: Segregate with peroxide forming compounds. When exposed to the atmosphere and only limited absorption takes, as in poorly sealed containers, form a highly explosive mixture. The formation of oxidation products is accompanied by the development of a yellow/brownish color. If discoloration is noticed, the substance should be destroyed at once by covering with much benzene, toluene, or kerosene and slowly adding diluted ethanol with stirring. Avoid storage with: Potassium chlorates, chromic anhydride, water, alcohol.	Yellow Stripe 	3/-/- WATER REACTIVE
110	Sodium Azide	Hazards: Explosive, Toxic (Poison) Conditions for Storage: Store in closed secondary container. Stable under ordinary conditions of use and storage. Decomposes explosively upon heating, shock, concussion, or friction. Avoid storage with: Acids (strong) Carbon disulfide, Metal salts, Benzoyl chloride plus potassium hydroxide, bromine, carbon disulfide, chromyl chloride, dibromalonitrile, dimethyl sulfate, barium carbonate	Yellow Stripe 	3/1/3
111	Sodium Bicarbonate	Hazards: Low hazard Conditions for Storage: Store under cold to warm conditions, 2 to 40 C, (36 to 104F). Avoid storage with: acids, monoammonium phosphate, sodium-potassium alloy.	Green 	1/0/0
112	Sodium Carbonate	Hazards: Low Hazard, irritation, hygroscopic Conditions for Storage: General chemical storage Avoid storage with: acids, fluorine, aluminum, phosphorous pentoxide, sulfuric acid, zinc, lithium, moisture, calcium hydroxide and 2,4,6-trinitrotoluene.	Green 	2/0/0
113	Sodium citrate	Hazards: Irritation Conditions for Storage: General chemical storage Avoid storage with: Strong oxidizers	Green 	1/0/0

	Chemical	Chemical Hazard and Storage Information	Storage Color	H/F/S Rating
114	Sodium Cyanide	Hazards: Corrosive ,Toxic Conditions for Storage: General chemical storage Avoid storage with: Acids, nitrates, nitrites, chlorates, fluorine, magnesium, strong oxidizers, water or weak alkaline solutions, carbon dioxide,combustibles and flammables.	Blue 	3/0/1
115	Sodium dodecyl Sulfate	Hazards: Flammable, Toxic Conditions for Storage: General chemical storage Avoid storage with: Strong oxidizers, acids.	Red 	1/2/0
116	Sodium Formate	Hazards: Irritant Conditions for Storage: General chemical storage Avoid storage with: strong acids	Green 	2/0/0
117	Sodium Hypochlorite (5%)	Hazards: Irritation Conditions for Storage: General chemical storage Avoid storage with: Ammonia (chloramine gas may evolve), amines, ammonium salts, aziridine, methanol, phenyl acetonitrile, cellulose, ethyleneimine, oxidizable metals, acids, bisulfates.	Green 	2/0/1
118	Sodium Iodide	Hazards: Toxic Conditions for Storage: General chemical storage Avoid storage with: Alkali metals, chloral hydrate, acids tartaric acid, potassium chlorate, metallic salts, iodine. Reacts violently with bromide trifluoride, perchloric acid, and oxidants.	Green 	2/0/1
119	Sodium Nitrate	Hazards: Oxidizer, Toxic Conditions for Storage: General chemical storage Avoid storage with: acids, barium rhodanide, boron phosphide, cyanides, sodium thiosulfate, sodium hypophosphite, sulfur plus charcoal, powdered aluminum and aluminum oxide, fibrous organic material, cellulosic materials, combustibles, organic or other readily oxidizable materials..	Yellow 	1/0/1 OXY
120	Sodium Phosphate (monobasic) (dibasic)	Hazards: Irritant Conditions for Storage: Keep in a well closed container stored under cold to warm conditions, 2 to 40 C, (36 to 104F). Avoid storage with: No incompatibility data found	Green 	1/0/0
121	Sodium Sulfate	Hazards: Low hazard Conditions for Storage: General chemical storage Avoid storage with: aluminum and magnesium, strong mineral acids and bases.	Green 	1/0/0

	Chemical	Chemical Hazard and Storage Information	Storage Color	H/F/S Rating
122	Sodium sulfite	Hazards: Toxic Conditions for Storage: General chemical storage. Avoid storage with: Acids, strong oxidizers, high temperatures.	Green 	2/0/0
123	Sodium Tetrahydro Borate (sodium borohydride)	Hazards: Corrosive, Flammable, Toxic, Dangerous when wet Conditions for Storage: General chemical storage Avoid storage with: water, acids or certain transition metal, oxidizing agents, sulfuric acid, ruthenium salt, metal salts and palladium.	Red Stripe 	3/1/2 WATER REACTIVE
124	Sodium Thiosulfate	Hazards: Mildly toxic Conditions for Storage: General chemical storage Avoid storage with: Sodium nitrate, halogens, oxidizing agents, acids.	Green 	1/0/0
125	Sulfuric Acid (52-100%)	Hazards: Oxidizer. Corrosive, Water reactive, Toxic Conditions for Storage: General chemical storage Avoid storage with: Water, potassium chlorate, potassium perchlorate, potassium permanganate, sodium, lithium, bases, organic material, halogens, metal acetylides, oxides and hydrides, metals (yields hydrogen gas), strong oxidizing and reducing agents, combustibles, carbides, chlorates, fulminates, nitrates, picrates, and powdered metals.	White 	3/0/0 WATER REACTIVE
126	Tetrahydrofuran (THF)	Hazards: Flammable, Toxic; Peroxide forming compound Conditions for Storage: Separate into area for Peroxide forming Compounds. Store in dark glass bottles or steel drums. Store in tightly closed containers (preferably under nitrogen atmosphere). Avoid storage with: air on standing. LiAlH ₂ , strong oxidizers, NaAlH ₂ and potassium hydroxide.	Red 	2/3/1
127	Toluene	Hazards: Flammable, Toxic Conditions for Storage: General chemical storage Avoid storage with: strong oxidizers, nitric and sulfuric acids, chlorine, nitrogen tetraoxide,	Red 	2/3/0
128	Triethylamine	Hazards: Corrosive, Flammable, Toxic Conditions for Storage: General chemical storage Avoid storage with: Acids, oxidizers, chlorine, hypochlorite, halogenated compounds and nitrogen tetraoxide, nitrous acid, nitrates, nitrous oxide.	Red 	3/3/0
129	Trifluoro acetic Acid	Hazards: Corrosive, Irritant Conditions for Storage: Store in area with acid resistant floors and good drainage. Avoid storage with: Bases, oxidizers, reducing agents, protect from moisture.	White 	3/0/0

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	Chemical	Chemical Hazard and Storage Information	Storage Color	H/F/S Rating
130	Urea	<p>Hazards: Toxic</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: calcium hypochlorite, sodium hypochlorite, sodium nitrite, gallium perchlorate, strong oxidizing agents (permanganate, dichromate, nitrate, chlorine), phosphorus pentachloride, nitrosyl perchlorate, titanium tetrachloride and chromyl chloride.</p>	Green 	1/0/0
131	Water Reactive (D.O.T. Dangerous when wet)	<p>Examples: Lithium and Li compounds, hydrides sodium and potassium metals Bromohydride,</p> <p>Hazards: Reactive</p> <p>Conditions for Storage: Can be stored with Organic compounds, Flammable Liquids, Flammable Solids, Organic Peroxide</p> <p>Avoid storage with: Alkalis, organic acids, inorganic acids, oxidizers, peroxide forming</p>	Yellow 	-/-/ WATER REACTIVE
132	Xylenes	<p>Hazards: Flammable, Toxic</p> <p>Conditions for Storage: General chemical storage</p> <p>Avoid storage with: Strong oxidizing agents, strong acids, acetic acid, nitric acid.</p>	Red 	2/3/0

Information contained in this table was compiled from published sources including:

- Material Safety Data Sheets, especially J.T. Baker
- Academic Laboratory Chemical Hazards Guidebook by William J. Mahn, Published by Van Nostrand, Reinhold, 1991,
- Fire Protection Guide to Hazardous Materials 11th edition, National Fire Protection Association, 1994,
- Hazardtext® Hazard Managements Database,
- INFOTEXT® Documents Database,
- Better Science Through Safety by Jack A. Gerlovich and Gary E. Downs, © 1981 by the Iowa State University Press.