



The following laboratory tests provide a guideline for P.C.D. ducting of exhaust fumes. As actual conditions, such as temperature and concentration vary greatly, samples are provided to test and approve for each application.

**E - Excellent    G - Good    S - Satisfactory    U - Unsatisfactory    N - Not Tested**

<b>Chemical</b>	<b>P.C.D.</b>	<b>Chemical</b>	<b>P.C.D.</b>	<b>Chemical</b>	<b>P.C.D.</b>
Acetaldehyde	U	Beer	E	Demineralized Water	E
Acetamide	N	Beet	E	Dextrin	E
Acetate Solvents - Crude	U	Benzol	U	Dextrose	E
Acetate Solvents - Pure	U	Benzoldehyde	U	Diazo Salts	E
Acetic Acid 0 - 20%	U	Benzene Sulfonic Acid 10%	E	Diglycolic Acid	E
Acetic Acid 20 - 30%	U	Benzoic	E	Dimethylamine	U
Acetic Acid 30 - 60%	U	Bismuth Carbonate	E	Diocylphthalate	U
Acetic Acid 80%	U	Black Liquor	E	Disodium Phosphate	E
Acetic Acid - Glacial	U	Bleach	U	Ethers	U
Acetic Acid Vapors	U	Borax	E	Ethyl Acetate	U
Acetic Anhydride	U	Boric Acid	E	Ethyl Acrylate	U
Acetone	U	Baron Trifluoride	E	Ethyl Alcohol	E
Acetyl Chloride	E	Bordeaux Mixture	N	Ethyl Chloride	U
Acetylene	E	Breeder Pellets	E	Ethyl Ether	U
Adipic Acid	E	Brine	E	Ethylene Bromide	U
Alcohol, Allyl	E	Bromic Acid	E	Ethylene Chlorohydrin	U
Alcohol, Amyl	E	Bromine Liquid	U	Ethylene Dichloride	U
Alcohol, Butyl	E	Bromine Water	E	Ethylene Glycol	E
Alcohol, Ethyl	E	Butadiene	E	Fatty Acids	E
Alcohol, Methyl	E	Butane	E	Ferric Chloride	N
Alcohol, Propyl	E	Butanol Primary	E	Ferric Nitrate	E
Alkaform Anesthesia	N	Butanol Secondary	E	Ferric Sulfate	E
Allyl Chloride	U	Butyl Acetate	U	Ferrous Chloride	E
Alum	E	Butyl Alcohol	E	Ferrous Sulfate	E
Alum, Chrome	E	Butylene	E	Fluorine Gas	E
Alum, Potassium	E	Butyl Phensi	E	Fluoroboric Acid	E
Aluminum Chloride	E	Butyne Diol	E	Fluorosilicic Acid	E
Aluminum Fluoride	E	Butyric Acid	G	Formaldehyde	E
Aluminum Hydroxide	E	Cadmium	N	Formic Acid	N
Aluminum Oxychloride	E	Calcium Bisulfite	E	Freon - 12	E
Aluminum - Molten	N	Calcium Carbonate	E	Fructose	E
Aluminum Nitrate	E	Calcium Chlorate	E	Furfural	U
Aluminum Sulfate	E	Calcium Chloride	U	Gallic Acid	E
Aluminum Sulfuric Acid 40 -70 95%	U	Calcium Hydroxide	E	Gas Coke Oven	E
Ammonia, Gas	E	Calcium Hypochlorite	U	Gas Natural	E
Ammonia, Liquid	S	Calcium Nitrate	E	Gas manufactured	U
Ammonia, Aqua 10%	E	Calcium Sulfate	E	Gasoline	E
Ammonium Acetate	N	Carbonated Beverages	N	Glauber's Salt	N
Ammonium Billuoride	E	Carbolic	N	Gold Cyanide Electroplating	N
Ammonium Bromide	N	Carbonic Acid	E	Glucose	E
Ammonium Carbonate	E	Carbon Bisulfide	U	Glycerine	E
Ammonium Chloride	E	Carbon Dioxide	E	Glycol	E
Ammonium Clouride 25%	E	Carbon Monoxide	E	Glycolic Acid	E
Ammonium Hydroxide 28%	S	Carbon Tetrachloride	S	Green Liquor	E
Ammonium Metaphosphate	E	Castor Oil	E	Heptaine	E
Ammonium Nitrate	E	Caustic Potash	S	Hexane	E
Ammonium Monophosphate	N	Caustic Soda	S	Hexanol Tertiary	E
Ammonium Oxalate	N	Chloracetic Acid	E	Hydrobromic Acid 20%	E
Ammonium Persulphate	E	Chloral Hydrate	E	Hydrochloric Acid 35%	E
Ammonium Phosphate	E	Chloric Acid 20%	E	Hydrochloric Acid 50%	E
Ammonium Sulfate	E	Chlorine Gas	G	Hydrocyanic Acid 10%	E
Ammonium Sulfide	E	Chlorine Water	U	Hydrofluoric Acid 50%	E
Ammonium Thiocyanate	E	Chloribenzene	U	Hydrogen	E
Amyl Acetate	U	Chloroform	U	Hydrogen Cyanide	E
Amyl Alcohol	E	Chlorosulfonic Acid	E	Hydrogen Peroxide 50%	E
Amyl Chloride	U	Chrome Alum	E	Hydrogen Phosphide	E
Aniline	U	Chromic Acid 50%	U	Hydrogen Sulfide Dry+	E
Aniline Chlorohydrate	U	Cider	N	HydrogenSulfide Aq. Sol.	E
Aniline Hydrochloride	U	Citric	E	Hydorquinone	E
Anthraquinone	E	Copper Carbonate	N	Hydroxylamine Sulfate	E
Anthraquinonesulfonic Acid	E	Copper Chloride	E	Hypochlorous Acid	E
Antimony Trichloride	E	Copper Cyanide	E	Iodine	U
Aqua Regia	U	Copper Fluoride	E	Jet Fuel JP - 4	E
Arsenic Acid	E	Copper Nitrate	E	Jet Fuel JP - 5	E
Arsenius	N	Copper Sulfate	E	Kerosene	E
Arylsulfonic Acid	E	Cottonseed Oil	E	Ketones	U
Baking Oven Gases	N	Cresol	U	Kraft Liquor	E
Barium Carbonate	E	Cresote	N	Lactic Acid 25%	E
Barium Chloride	E	Cresylic Acid 50%	N	Lactic plus Salt	N
Barium Hydrate	N	Croton Aldehyde	U	Lard Oil	E
Barium Hydroxide	E	Crude Oil	E	Lauric Acid	E
Barium Sulfate	E	Cyclohexanol	U	Lauryl Chloride	E
Barium Sulfide	N	Cyclohexanon	U	Lead Molten	N

Chemical	P.C.D.	Chemical	P.C.D.	Chemical	P.C.D.
Lead Acetate	E	Plating Solutions, Zinc	N	Sour Crude Oil	E
Lemon Oil	N	Potassium Aluminum Sulfate	E	Speculum Plating Solution	N
Linseed Oil	E	Potassium Bicarbonate	N	Stannic Chloride	E
Linoleic Acid	E	Potassium Bichromate	E	Stannous Chloride	E
Liqueurs	E	Potassium Borate	E	Stearic Acid	E
Lubricating Oil	N	Potassium Bromate	E	Stoddard's Solvent	E
Lysol	N	Potassium Bromide	E	Succinic	N
Magnesium Carbonate	E	Potassium Carbonate	E	Sulfated Detergents	N
Magnesium Chloride	E	Potassium Chlorate Aqueous	N	Sulfur	E
Magnesium Hydroxide	E	Potassium Chloride	E	Sulfur Chloride	E
Magnesium Nitrate	E	Potassium Chromate	N	Sulfur Dioxide Dry	E
Magnesium Sulfate	E	Potassium Cyanide	E	Sulfur Dioxide Wet	G
Maleic Acid	E	Potassium Dichromate	E	Sulfur Oxychloride	N
Malic Acid	E	Potassium Ferricyanide	E	Sulfuric Acid 10%	E
Meats	N	Potassium Ferrocyanide	E	Sulfuric Acid 30%	E
Mercuric Chloride	E	Potassium Fluoride	E	Sulfuric Acid 60%	E
Mercuric Cyanide	E	Potassium Hydrate	N	Sulfuric Acid 70%	E
Mercurous Nitrate	E	Potassium Hydroxide	E	Sulfuric Acid 80%	E
Mercury	E	Potassium Hypochlorite	N	Sulfuric Acid 90%	E
Methane	E	Potassium Iodide	N	Sulfuric Acid 95%	E
Metnyl Alcohol	E	Potassium Nitrate	E	Sulfuric Acid 103%	U
Methyl Chloride	U	Potassium Oxalate	N	Sulfurous Acid	E
Methyl Sulfate	E	Potassium Perborate	E	Sulfur Trioxide	E
Methyl Sulfuric Acid	E	Potassium Perchlorate	E	Steam and Air	N
Methylene Chloride	U	Potassium Permanganate 10%	S	Steam and CO <sub>2</sub> and Air	N
Milk	E	Potassium Persulfate	E	Seam SO <sub>2</sub> CO <sub>2</sub> and Air	N
Mineral Oil	E	Potassium Sulfate	E	Syrup	N
Mine Water	N	Propane	E	Tall Oil	E
Mixed Acids	U	Propargyl Alcohol	E	Tannic Acid	E
Molasses	E	Propyl Alcohol	E	Tanning Liquors	E
Molybdc	N	Propylene Dichloride	U	Tartaric Acid	E
Monoethanolamine	N	Pyrogallic	N	Tetraethyl Lead	E
Naphtha	E	Pyroligneus	N	Tetrahydrofuran	U
Naphthalene	U	Rayon Coagulating Bath	N	Thionyl Chloride	U
Nickel Chloride	E	Salenic Acid Aqueous	E	Thread Cutting Oils	N
Nickel Nitrate	E	Salicic Acid	E	Titanium Tetrachloride	E
Nickel Sulfate	E	Salicylaldehyde	N	Toluene, Toluol	U
Nicotine	E	Sea Water	E	Toluene-Kerosene Mixture	N
Nicotinic Acid	E	Sauerkraut Brine	N	Tomato Juice	N
Nitric Acid 10%	E	Selenic Acid	E	Toxaphene-Xylene	N
Nitric Acid 70%	U	Silicic Acid	E	Tributyl Phosphate	E
Nitric Acid 100%	U	Silver Bromide	N	Trichloroacetic Acid	N
Nitrobenzene	U	Silber Nitrate	E	Trichloroethylene	E
Nitrous Acid 10%	N	Silver Cyanide Electroplating Sol.	S	Triethanolamine	N
Nitrous Oxide	E	Soaps	E	Triethylamine	N
Ocenol	E	Soap Solutions	E	Trimethylpropane	E
Oil and Fats	E	Sodium Acetate	E	Urea	E
Oleic Acid	E	Sodium Benzoate	E	Uric	E
Oleum	U	Sodium Bicarbonate	E	Urine	E
Oxolic Acid	E	Sodium Bichromate	N	Vegetable Oil	N
Oxygen	E	Sodium Bisulfate	E	Vegetable Juices	N
Ozone	G	Sodium Borate	N	Vinyl Acetate	U
Palmitic Acid 10%	E	Sodium Bisulfite	E	Visco 202 Crude oil Additive	N
Palmitic Acid 70%	E	Sodium Bromide	E	Water	E
Peracetic Acid 40%	N	Sodium Carbonate	E	Water Acid Mine	E
Perchloric Acid 10%	E	Sodium Chlorate	E	Water Demineralized	E
Perchloric Acid 70%	U	Sodium Chloride	E	Water Distilled	E
Phenol	E	Sodium Chlorite	N	Water Salt	E
Phenylhydrazine	U	Sodium Citrate	N	Water Sewage	E
Phenylhydrazine Hydrochloride	U	Sodium Cyanide	E	Whiskey	E
Phosgene Liquid	U	Sodium Dichromate	E	White Liquor	E
Phosgene Gas	E	Sodium Ferricyanide	E	Wines	E
Phosphoric Acid 10%	E	Sodium Ferrocyanide	E	Xylene or Xylol	U
Phosphoric Acid 25, 50%	E	Sodium Fluoride	N	Zinc Chloride	E
Phosphoric Acid 50, 85%	E	Sodium Hydroxide 15%	E	Zinc Chromate	E
Phosphorus Yellow	E	Sodium Hydroxide 30%	S	Zinc Cyanide	E
Phosphorus Pentoxide	E	Sodium Hydroxide 70%	S	Zinc Molten	N
Phosphorous Trichloride	U	Sodium Hypochlorite	E	Zinc Nitrate	E
Photographic Solutions	E	Sodium Iodide	N	Zinc Sulfate	E
Picric Acid	U	Sodium Lactate	N		
Plating Solutions, Brass	N	Sodium Nitrate	E		
Plating Solutions, Cadmium	N	Sodium Nitrite	E		
Plating Solutions, Chrome 25%	N	Sodium Peroxide	N		
Plating Solutions, Chrome 40%	N	Sodium Phosphate	N		
Plating Solutions, Copper	N	Sodium Sulfate	E		
Plating Solutions, Gold	N	Sodium Sulfide	E		
Plating Solutions, Iron	N	Sodium Sulfite	E		
Plating Solutions, Lead	N	Sodium Thiosulfate 20%	N		
Plating Solutions, Nickel	N	plus Acetic Acid 20%	N		
Plating Solutions, Rhodium	N	Sodium Thiosulfate	N		
Plating Solutions, Silver	S	plus 4% Potassium Meta Bisulfate	N		
Plating Solutions, Tin	N	Soda Ash	N		