Epoxy Paint / Resin Chemical Resistance Table

The chemical resistance of certain epoxies from Progressive Epoxy Polymers, Inc.

SNOPSIS:

Basic chemical resistanc table for several of the the part epoxy resin - epoxy paint products (including Basic No Blush (tm) two part, clear marine epoxy.

Keywords: epoxy, underwater epoxy, two part epoxy coatings,

"Value Based Epoxies"

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Chemical Resistance Guide (Room Temperature)

1 = Constant Immersion 2 = Intermittent Immersion 3 = Secondary Containment (72 hours) 4 = Splash & Spill, Immediate Clean Up
NR = Not Recommended

Selected Products

Group A = No Blush formulations; Low V
Group B = Corro Coat FC 2100, Hi Flex 3
Group C = Corro Coat FC 2100N (novolac)

NOTE: Industrial Floor Epoxy - Between Group A and Group B

Reagent	Group A	Group B	Group C	Reagent	Group A	Group B	Group C
Acetaldehyde	3	3	2	Aluminum Potassium Sulfate	3	3	2
Acetamide	2	2	2	Aluminum Sulfate	3	3	2
Acetate Solvent	4	4	3	Amines	3	3	2
Acetic Acid 1-10%	3	3	2	Aminoethanol	3	3	2
Acetic Acid 11-25%	4	4	2	Ammonia Anhydrous	3	3	2
Acetic Acid 26-100%	NR	NR	3	Ammonia Aqueous	3	3	2
Glacial Acetic 100%	NR	NR	3	Ammonium Bifluoride	3	3	2
Acetic Anhydride	2	2	2	Ammonium Carbonate	3	3	2
Acetone 90˚F	4	4	4	Ammonium Chloride	3	3	2
Acetonitrile	3	3	2	Ammonium Fluoride	3	3	2
Acetophenone	4	4	3	Ammonium Hydroxide	3	3	1
Acetyl Chloride	4	4	3	Ammonium Nitrate	3	3	2
Acetylene	3	3	2	Ammonium Persulfate	3	3	2
Acid Mine Water	2	2	1	Ammonium Phosphate	3	3	2
Acrylonitrile	3	3	2	Ammonium Sulphate	3	3	2
Adipic Acid	3	3	2	Ammonium Sulfite	4	4	3

Aero Lubriplate	4	4	2	Amyl Acetate	3	3	2
Aerosafe 2300	4	4	2	Amyl Alcohol	3	3	2
Aerosafe 2300W	4	4	2	Amyl Chloride	2	2	2
Aerosafe 1AC	4	4	2	Aniline	4	4	3
Aeroshell 17 Grease	3	3	2	Aniline Hydrochloride	4	4	3
Aeroshell 7A Grease	3	3	2	Animal Oil (Lard)	3	3	2
Aeroshell 750	3	3	2	Anti-Freeze (Alcohol)	4	4	2
Alcohol (rubbing)	4	4	2	Anti-Freeze (Glycol)	4	4	2
Alkaline Solutions	3	3	2	Antimony Trichloride	4	4	3
Allyl Alcohol	4	4	2	Aqua Regia	4	4	3
Allyl Chloride	3	3	2	Aroclor	3	3	2
Almond Oil (Artificial)	3	3	2	Aromatic Hydrocarbons	4	4	4
Aluminum Chloride	3	3	2	Arsenic Acid	3	3	2
Aluminum Chlorohydroxide	3	3	2	Asphalt	2	2	1
Aluminum Fluoride	3	3	2	Asphalt Emulsions	4	4	2
Aluminum Hydroxide	3	3	2	Banana Oil	4	4	2
Aluminum Nitrate	3	3	2	Barbeque Sauce	3	3	2
Barium Carbonate	3	3	2	Butyl Amine	3	3	2
Barium Chloride	3	3	2	Butyl Cellosolve	3	3	1
Barium Cyanide	3	3	2	Butyl Chloride	4	4	3
Barium Hydroxide	3	3	2	Butyl Ether	3	3	2
Barium Nitrate	3	3	2	Butyl Phthalate	3	3	2
Barium Sulfate	3	3	2	Butylene	3	3	2
Barium Sulfide	4	4	2	Calcium Bisulfite	3	3	2
Beer	2	2	2	Calcium Carbonate	2	2	1
Beet Sugar Liquids	3	3	2	Calcium Chloride	2	2	2
Beet Sugar Liquors	3	3	2	Calcium Hydroxide 30%	3	3	2
Benzaldehyde	3	3	2	Calcium Hypochlorite	3	3	2
Benzene	4	4	3	Calcium Nitrate	3	3	2
Benzene Sulfonic Acid	3	3	2	Calcium Sulfate	3	3	2
Benzoic Acid	3	3	2	Cane Juice	3	3	2
Benzonitrile	4	4	3	Cane Sugar Liquors	3	3	2
Benzyl Alcohol	2	2	2	Carbolic Acid (Phenol)	4	4	2
Benzyl Chloride	2	2	2	Carbon Dioxide	3	3	2
Bleach (Liquor)	4	4	3	Carbon Disulfide	4	4	3
Bleach Solutions	4	4	3	Carbon Monoxide	3	3	2
Bleach Powder	4	4	2	Carbon Tetrachloride	2	2	1
Blood	3	3	2	Carbonic Acid	4	4	3
Borax	2	2	1	Castor Oil	3	3	2
Boric Acid	3	3	2	Catsup	2	2	1
Break Fluid (Petroleum)	3	3	2	Caustic	3	3	2
Break Fluid (Non-Petroleum)	3	3	2	Cellosolve Acetate	3	3	2

Bromine Gas (Dry)	NR	NR	4
Bromine Gas (Wet)	NR	NR	3
Butadiene	3	3	2
Butane	3	3	2
Butanol	3	3	2
Butter	3	3	2
Buttermilk	3	3	2
Butyl Acetate	3	3	1
Chromic Acid Dilute	4	4	2
Cider Apple Juice	3	3	2
Citric Acid Concentrated	2	2	1
Clorox Bleach	4	4	3
Coca Cola Syrup	3	3	2
Coconut Oil	3	3	2
Cod Liver Oil	2	2	1
Copper Cyanide	3	3	2
Copper Fluoride	3	3	2
Copper Nitrate	3	3	2
Copper Sulfate	3	3	2
Corn Oil	2	2	1
Cotttonseed Oil	2	2	1
Creosote	3	3	2
Cresylic Acid	3	3	2
Crude Oil	2	2	1
Cupric Chloride	3	3	2
Cutting Oils All	3	3	2
Cyanic Acid	3	3	2
Cyclohexane	2	2	1
Cyclohexanol	2	2	2
Cyclohexanone	4	4	3
De-Ionized Water	1	1	1
Detergent Solutions	2	2	1
Detergents General	2	2	2
Diacetone Alcohol	3	3	2
Dibasic Ester	3	3	2
Dibutyl Phthalate	2	2	2
Dichlorobenzene	4	4	3
Dichlorodifluoro Methane	4	4	3
Dichloroethane	4	4	3
Dichloroethylene	3	3	2
Disobutylene	3	3	2
Gelatin	3	3	2
Cellosolve Butyl	3	3	2
Cellosolve	3	3	2
Chlorinated Water	3	3	2
Chlorine Dry	3	3	2
Chlorine Wet	NR	NR	3
Chlorobenzene	4	4	3
Chlorosulfonic Acid Dilute	4	4	3
Chocolate Syrup	4	4	2
Diesel Fuel	1	1	1
Diethylamine	3	3	2
Dimethyl Aniline	3	3	2
Dimethyl Phthalate	4	4	3
Diphenyl Ether	3	3	2
Diphenyl Oxide	3	3	2
Epichlorohydrin Dry	4	4	3
Ethane	3	3	2
Ethanol	3	3	2
Ethanolamine	3	3	2
Ethyl Acetate	3	3	2
Ethyl Chloride Wet	3	3	2
Ethyl Ether	4	4	3
Ether Sulfate	3	3	2
Ethylene Chloride	4	4	3
Ethylene Glycol	3	3	2
Ethylene Oxide	3	3	2
Fatty Acids	3	3	2
Ferric Chloride	3	3	2
Ferric Nitrate	3	3	2
Ferric Sulfate	3	3	2
Ferrous Chloride	3	3	2
Ferrous Sulfate	3	3	2
Fluoboric Acid	3	3	2
Fluosilicic Acid	4	4	3
Formaldehyde	4	4	3
Freon Dry	4	4	3
Fuel Oil	3	3	2
Furan	2	2	1
Furfural	2	2	1
Gas Natural	3	3	2
Gasoline Aviation	1	1	1
Gasoline All	1	1	1
Lacquers	3	3	2

Glucose	3	3	2	Lactic Acid 1-50%	4	4	2
Glue	3	3	2	Lard	3	3	2
Glycerine	3	3	2	Latex	1	1	1
Glycol	3	3	2	Lead Acetate	2	2	1
Glycolic Acid	3	3	2	Lead Sulfamate	2	2	1
Grape Juice	3	3	2	Lime	1	1	1
Grape Fruit Oil	3	3	2	Linseed Oil	2	2	1
Grease All	2	2	2	LPG Propane	2	2	2
Heptane	2	2	2	Lubricating Oil	2	2	1
Hexane	2	2	2	Lye	2	2	1
Hexanol Tertiary	3	3	2	M Cresol	2	2	1
Honey	2	2	1	Magnesium Carbonate	2	2	1
Hydraulic Fluids	2	2	2	Magnesium Chloride	2	2	1
Hydrazine	3	3	2	Magnesium Hydroxide	2	2	1
Hydrochloric Acid 1-37%	2	2	2	Magnesium Nitrate	2	2	1
Hydrochloric Acid 1-20%	2	2	2	Magnesium Sulfate	2	2	1
Hydrofluosilicic Acid	4	4	3	Maleic Acid	3	3	2
Hydrogen Chloride Gas	3	3	2	Malic Acid	4	4	3
Hydrogen Cyanide	3	3	2	Mayonnaise	3	3	2
Hydrogen Fluoride Anhyd.	4	4	3	Mercuric Chloride	3	3	2
Hydrogen Gas	3	3	2	Mercuric Cyanide	3	3	2
Hydrogen Peroxide	4	4	3	Mercurious Nitrate	4	4	2
Hydrogen Sulfide	3	3	2	Mercury	3	3	2
Hypochlorous Acid	4	4	3	Methanol	3	2	2
Isooctane	3	3	2	Methyl Alcohol	4	4	3
Isopropanol	1	1	1	Methyl Amine	3	3	2
Isopropyl Acetate	2	2	2	Methyl Bromide	4	4	3
Isopropyl Alcohol	3	3	2	Methyl Cellosolve	4	4	3
Jet Fuel JP4-6	2	1	1	Methyl Chloride Dry/Wet	3	3	2
Kerosene	2	1	1	Methyl Ethyl Ketone	4	4	4
Ketchup	2	2	1	Methylene Chloride	NR	NR	NR
Keytones	NR	4	4	Milk	2	2	1
Mineral Oil	2	2	1	Plating Solutions Chrome	4	4	4
Molasses	2	2	1	Plating Solutions Copper	4	4	2
Monochlorobenzene	4	4	3	Plating Solutions Gold	4	4	3
Motor Oil	1	1	1	Plating Solutions Lead	4	4	3
Muriatic Acid	3	3	1	Plating Solutions Nickel	4	3	2
Mustard	3	3	2	Plating Solutions Silver	4	3	2
N-Octane	3	3	2	Plating Solutions Tin	4	3	2
Napthalene	3	3	2	Plating Solutions Zinc	4	3	2
Nickel Chloride	3	3	2	Potassium Aluminum Sulfate	3	3	2
Nickel Nitrate	3	3	2	Potassium Bicarbonate	3	3	2

Nickel Sulfate	3	3	2	Potassium Bichromate	4	4	2
Nitric Acid 1-10%	3	2	1	Potassium Bromide	3	3	2
Nitric Acid 11-25%	4	3	2	Potassium Carbonate	3	3	1
Nitric Acid 26-35%	4	4	3	Potassium Chlorate	3	3	1
Nitric Acid 36-50%	NR	NR	4	Potassium Chloride	3	3	1
Nitro Benzene	NR	NR	3	Potassium Chromate	4	4	2
Oils Crude	2	2	1	Potassium Cyanide	4	4	3
Oils Mineral	2	2	1	Potassium Dichromate	4	4	3
Oils Vegetable	2	2	1	Potassium Ferricyanide	4	3	2
Oils Waste	2	2	1	Potassium Ferrocyanide	4	3	2
Oleic Acid	3	3	2	Potassium Hydroxide	4	3	1
Olive Oil	3	3	2	Potassium Hypochlorite	4	4	3
Oxalic Acid	3	3	2	Potassium Nitrate	4	4	2
Paraffin	2	2	1	Potassium Permanganate	4	3	2
Peanut Oil	2	2	1	Potassium Sulfate	3	3	2
Pentane	3	3	2	Potassium Sulfide	3	3	2
Petroleum	2	1	1	Potassium Sulfite	3	3	2
Petroleum Ether	3	3	2	Propane	4	3	2
Phosphoric Acid 1-85%	4	3	2	Propyl Alcohol	3	3	2
Phosphorus Trichloride	3	3	2	Propylene Glycol	3	3	2
Photographic Solutions	3	3	2	Pydraul	4	3	2
Plating Solutions Brass	NR	4	3	Pyridine	4	3	2
Plating Solutions Cadmium	NR	4	3	Pyrogallic Acid	4	3	2
Pyroligneous Acid	4	4	3	Sodium Citrate	4	3	2
Quinine Sulfate	3	3	2	Sodium Cyanide	4	3	2
Resorcinol	4	4	3	Sodium Dichromate	3	3	2
Rosin	4	3	2	Sodium Ferricyanide	3	3	2
Rum	4	4	2	Sodium Fluoride	3	3	2
Salad Dressing	3	3	2	Sodium Hydroxide	2	2	1
Salicylaldehyde	4	3	2	Sodium Hypochlorite	4	3	2
Salicylic Acid	4	3	2	Sodium Hyposulfite	4	3	2
Salt Brine	2	1	1	Sodium Metaphosphate	3	3	2
Salt Water	1	1	1	Sodium Metasilicate	3	3	2
Sea Water	1	1	1	Sodium Nitrate	4	3	2
Sewage	2	1	1	Sodium Perborate	4	4	3
Shellac	4	3	2	Sodium Peroxide	NR	NR	4
Silicone Oil	3	3	2	Sodium Phosphates	4	4	3
Silver Bromide	4	3	2	Sodium Silicate	3	3	2
Silver Cyanide	NR	4	3	Sodium Sulfate	3	3	2
Silver Nitrate	4	3	2	Sodium Sulfide	2	2	1
Skydrol	2	1	1	Sodium Sulfite	3	3	2
Soap Solutions	1	1	1	Sodium Thiosulfate	3	3	2

Sodium Acetate	2	2	1	Soybean Oil	3	3	2
Sodium Aluminate	3	3	2	Soy Sauce	3	3	2
Sodium Aluminum Sulfate	3	3	2	Stannic Chloride	3	3	2
Sodium Benzoate	3	3	2	Stannous Chloride	3	3	2
Sodium Bicarbonate	2	2	1	Starch	3	3	2
Sodium Bichromate	3	3	2	Stearic Acid	4	3	2
Sodium Bisulfate	3	3	2	Stoddard Solvent	4	3	3
Sodium Bisulfite	3	3	2	Styrene	4	3	2
Sodium Borate	3	3	2	Sugar	2	2	1
Sodium Bromide	3	3	2	Sulfate Liquor Black	4	3	1
Sodium Carbonate	4	3	2	Sulfate Liquor Green	4	3	1
Sodium Chlorate	3	3	2	Sulfate Liquor White	4	3	1
Sodium Chloride	3	3	2	Sulfinol	4	4	2
Sodium Chromate	4	4	3	Sulfur	4	3	2
Sulfur Chloride	4	4	3	Tricresyl Phosphate	3	3	2
Sulfur Dioxide Wet	4	4	3	Triethanolamine	4	3	2
Sulfur Trioxide	4	3	2	Triethylamine	4	3	2
Sulfuric Acid 1-85%	4	3	1	Trisodium Phosphate	3	3	2
Sulfuric Acid 86-98%	NR	NR	1	Tung Oil	4	3	2
Sulfurous Acid	4	3	2	Undecyl Alcohol	4	3	2
Tallow	3	3	2	Urea	4	3	2
Tannic Acid	4	3	2	Urine	1	1	1
Tanning Liquor	4	3	2	Vanilla Extract	2	1	1
Tar & Tar Oil	4	3	2	Varnish	4	3	2
Tartaric Acid	4	3	2	Vegetable Juices	2	2	1
Tetrahydrofuran	4	3	2	Vegetable Oil	2	2	1
Tetrahydronaphthaline	4	4	3	Vinegar	4	3	2
Tetraphosphoric Acid	4	4	3	Vinyl Acetate	4	3	2
Tin Tetrachloride	4	3	2	Vinyl Chloride	4	4	2
Toluene	4	2	1	Water (All)	1	1	1
Tomato Juice	2	2	1	Wax	1	1	1
Transformer Oil	4	3	2	Whiskey	4	3	2
Transmission Fluid	4	3	2	White Liquor	4	3	1
Tributyl Phosphate	4	3	2	Wine	4	3	2
Trichloroethane	4	3	2	Xylene	4	4	3
Trichloropropane	4	3	2	Zinc Chloride	4	3	2
Trichlorotrifluoroethane	4	3	2	Zinc Sulfate	4	3	2

The chemical ratings are based on continuous immersion testing and actual field applications, and is intended to serve only as a guide. It is the users responsibility to verify the suitability of the coating for the intended service by performing test patches.

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