Acrylic & Polycarbonate Compatibility

Certain chemicals that may exist in end-user locations release airborne contaminants that can impact the integrity and safety of key fixture components that contain acrylic or polycarbonate material. Immediate damage may occur such as crazing, cracking, permeation losses and mechanical failure. Products with visually noticeable deterioration have diminished integrity and must be replaced immediately with a more suitable product for the application.

The following tables identify the most common chemicals and is not intended to be all-inclusive. Exposure to compounds identified as "Not Acceptable" will void all warranties associated with the product. Acrylic or polycarbonate components should not be used in areas where these chemicals are used and where these chemicals become mists or airborne vapors. Ensure that chemical interactions are considered when selecting fixtures. For additional information please consult an authorized factory representative.

The statements, technical information and recommendations obtained herein are believed to be accurate as of June 1, 2009. Since the conditions and methods of use of the product and of the information referred to herein are beyond our control, Acuity Brands Lighting expressly disclaims any and all liability. NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE CONCERNING THE GOODS DESCRIBED OR THE INFORMATION PROVIDED HEREIN. The user should thoroughly test any application before commercialization.

Rating is based on visual appearance at ambient temperature 68°F, 50% humidity. Consult factory where applicable. All technical information is believed to be accurate as of June 1, 2009.

ACRYLIC ENVIRONMENTAL COMPATIBILITY

NOT ACCEPTABLE		
Acetaldehyde	Cinnamon Oil	Methyl Salicyclate
_ Acetates	Cloves	Methylamine
Acetic Acid, 50%+	Cosmoline Removers	Methylene Dichloride
Acetic Anhydride	Cresol	Mineral Oil @ 40°C+
Acetone	Cyclohexane	Nail Polish
Acetonitrile	Cyclohexanone	Naphtha
Acetophenone	Cyclohexene	n-butyric Acid, 100%
Acrylic Paints	Diacetone Alcohol	Nitric Acid, 40%+
Alcohol, Allyl	Diamyl Phthalate	Nitrobenzene
Alcohol, Amyl	Dibutyl Sebacate	Nitrocellulose
Alcohol, Benzyl	Diethyl Ether	n-Octane
Alcohol, Butyl (Butanol)	Dimethyl Formamide	Oleum
Alcohol, Ethyl (Ethanol), 50%+	Dioctyl Sebacate	Organic Solvents
Alcohol, Isopropyl	Dioxane	Paint Removers
Alcohol, Methyl (Methanol), 10%+	Ether	Paint Thinner
Aluminum Hydroxide	Ethyl Acetate	Perchlorethylene
Amyl Acetate	Ethyl Bromide	Petroleum Ether (100-120°C)
Ammonia @ 40°C+	Ethyl Butyrate	_ Phenols
Aniline	Ethylene Bromide	Phosphoric Acid, 95%
Aromatic Solvents	Ethylene Chloride	Phosphoric Trichloride
Aviation Fuel (100 Octane)	Ethylene Dibromide	_ Phthalates
Benzaldehyde	Ethylene Oxide (Moist)	Pyridine
Benzene	_ Fluorides	Salicylic Acid
Benzoic Aldehyde	Formic Acid	Silicon Tetrachloride
Bituminous Emulsions	Fuels w/ Benzene (Gasoline)	Sodium Phosphate
Brake Fluid	Glycol	Sulfoxides
Bromine Gas	Hydrofluoric Acid	Sulfur Dioxide, Liquid
Butraldehyde	Hydrochloric Acid, 40%+	Sulfuric Acid, 65% @ 40°C+
Butyl Acetyl Ricinoleate	Hydrogen Peroxide, 40%+	Sulfurous Acid, Concentrated
Butyl Lactate	Iron Perchloride	Tincture of Iodine, 5%
Butyl Stearate	Isoctane	Toluene
Carbolic Acid	_ Ketones	Transformer Oil
Carbon Disultide	Lacquer Thinner	Trichloraethane
Carbon Tetrachloride	Lactic Acid Butyl Ester	Trichloroacetic Acid
Cellulose Paints	Mercury Chloride	Trichloroethylene
Chlorinated Hydrocarbons	Meta-Cresol	Turpentine
Chlorinated Solvents	Methyl Benzoate	Vegetable Oil
Chlorine Gas	Methyl Chloride	Xylene
Chlorophenol	Methyl Cycohexanol	
Chromic Acid	Methyl Naphthalene	

ACCEPTABLE		
2-Ethylhexyl Sebacate	Fruit Juice	Potassium Chlorate
Acetic Acid, 5%	Glycerol (Glycerine)	Potassium Cyanide
Ammonia-Based Cleaners @ 25°C	Heptane	Potassium Dichromate, 10%
Ammonia @ 25°C	Hexane	Potassium Hydroxide @ 25°C
Ammonium Hydroxide, 28%	Hydrochloric Acid, 38%	Potassium Permanganate
Ammonium Nitrate	Hydrogen Peroxide, 30%	Potassium Sulfite
Ammonium Phosphate	Hydrogen Sulfide	Power Steering Fluid
Aniseed, Bay Leaves, Nutmeg	Kerosene	Propylene
Anti-freeze	Lactic Acid, 20%	Pure-oil Paints
Beer	Metal Carbonates	Silicone Oil
Bleaching Powder Paste	Metal Chlorides	Silver Nitrate
Bleaching Powder Solution, 5%	Metal Sulfates	Soap Suds
Butane	Methane Gas	Sodium Chloride, 10%
Calcium Hypochlorite	Milk	Sodium Cyanide
Car Wash Detergent	Motor Oil	Sodium Fluoride
Carbon Dioxide Gas	Natural Gas	Sodium Hydroxide, 60%
Carbon Monoxide Gas	Nitric Acid, 20%	Sodium Hypochlorite, 15%
Caustic Potash	Nitric Oxide	Sodium Nitrate
Chlorine Based Cleaners @ 25°C	Nitrogen Dioxide Gas	Sodium Thiosulphate, 40%
Chlorine, Aqueous, 2%	Nitrogen Monoxide Gas	Stearic Acid
Citric Acid, 20%	Olefric Carbolic Acids	Sulfur Dioxide, Dry Gas
Coffee (Unflavored)	Oleic Acid	Sulfuric Acid, 30% @ 25°C
Cooking Oil	Olive Oil	Sulfurous Acid, 5%
Cottonseed Oil	Oxalic Acid, 100%	Tartaric Acid, 50%
Diethylene Glycol	Oxygen Gas	Transmission Fluid
Epoxy Adhesives	Ozone Gas	Tricresyl Phosphate
Ethyl Alcohol, 15%	Paraffin, Medicinal	Triethyl Amine
Ethylene Glycol	Pepper, Onions	Vinegar
Ethylene Oxide (Dry)	Phosphoric Acid, 10%	Wax Polish
Ferric Chloride, Aqueous, 10%	Photographic Baths	Whitewash
Formaldehyde, Aqueous, 40%	Polishing Compounds	Wine

POLYCARBONATE ENVIRONMENTAL COMPATIBILITY

NOT ACCEPTABLE		
Acetaldehyde, 100%	Chromic Acid	Methylene Dichloride
_Acetates	Clove Oil	Mineral Oil @ 40°C+
Acetic Acid, Glacial, 100%	Cosmoline Removers	Mineral Spirits
Acetic Anhydride	Cresol	Nail Polish
Acetone	Cutting Fluids and Oils	Naphtha (Petroleum Ether)
Acetonitrile	Cyclohexanone	Naphthenic Acids
Acetophenone	Cyclohexene	n-butyric Acid, 100%
Alcohol, Allyl	Diamyl Phthalate	Nitric Acid, 25%+
Alcohol, Amyl	Dibutyl Sebacate	Nitrobenzene
Alcohol, Benzyl	Diethyl Ether	n-Octane
Alcohol, Ethyl (Ethanol), 50%	Dimethyl Formamide	Oleum
Alcohol, Isopropyl, 100%	Dioctyl Sebacate	Paint Removers
Alcohol, Methyl (Methanol), 50%	Dioxane	Paint Thinner
Aluminum Hydroxide	Ether	Perchlorethylene
_Amines	Ethyl Acetate	Phenols
Ammonia	Ethyl Alcohol, Concentrated	Phenol, Aqueous, 5%
Ammonium Hydroxide	Ethyl Bromide	_Phthalates
Amyl Acetate	Ethyl Butyrate	Potassium Hydroxide (Potash)
Aniline	Ethylene Bromide	Propane
Aromatic Hydrocarbons	Ethylene Dibromide	Pyridine
Aviation Fuel	Ethylene Oxide	Sodium Hydroxide
Benzaldehyde	Freon	Sodium Hypochlorite, 30%
Benzene	Fuels w/ Benzene (Gasoline)	Sodium Nitrate
Benzoic Aldehyde	Glass Cleaners	Sodium Sulfide
Brake Fluid	Hydrochloric Acid, 25%+	_Sulfoxides
Bromine	Hydrofluoric Acid	Sulfur Dioxide
Butadiene	Hydrogen Peroxide, 40%+	Sulfuric Acid, 70%+
Butane	Isoctane	Sulfurous Acid
Butyl Acetyl Ricinoleate	Kerosene	Tea
Butyl Stearate	_Ketones	Tincture of Iodine, 5%
Calcium Hypochlorite	Lacquer Thinner	Toluene
Carbolic Acid	Lactic Acid Butyl Ester	Transformer Oil
Carbon Disulfide	Meta-Cresol	Trichloroacetic Acid
Carbon Tetrachloride	Methyl Benzoate	Trichloroethane
Cellulose Paints	Methyl Chloride	Trichloroethylene
Chlorinated Hydrocarbons	Methyl Cycohexanol	Triethanalomine
Chlorinated Solvents	Methyl Ethyl Ketone	Turpentine
Chlorine	Methyl Naphthalene	Urea
Chlorophenol	Methyl Salicyclate	Xylene
Diacetone Alcohol	Methylamine	

ACCEPTABLE		
Acetic Acid, 5%	Hydrochloric Acid, 15%	Silicone Oil
Ammonium Chloride	Hydrogen Peroxide, 30%	Silver Nitrate
Ammonium Phosphate	Lactic Acid, 20%	Soap Solutions
Ammonium Sulfate	Linseed Oil	Sodium Bicarbonate
Aniseed, Bay Leaves	Metal Carbonates	Sodium Chlorate
Anti-freeze	Metal Chlorides	Sodium Chloride, 10%
Beer	Metal Sulfates	Sodium Hypochlorite, 15%
Benzoic Acid	Methane Gas	Sodium Peroxide
Bleaching Powder Solution, 2%	Milk	Sodium Thiosulphate, 40%
Boric Acid, 10%	Mineral Oil @ 25°C	Stearic Acid
Car Wash Detergent	Motor Oil	Sulfur Dioxide, Dry Gas
Carbon Dioxide	Natural Gas	Sulfuric Acid, 30%
Carbon Monoxide	Nitric Acid, 10%	Sulfurous Acid, 5%
Carbonic Acid	Nitrogen Dioxide Gas	Tannic Acid, 10%
Chlorine-base Cleaners (Clorox)	Oleic Acid	Tartaric Acid, 50%
Cinnamon, Onions	Olive Oil	Transmission Fluid
Citric Acid, 10%	Oxalic Acid, 100%	Tripropylene Glycol
Cooking Oil	Oxygen	Vegetable Oils
Cottonseed Oil	Paraffin, Medicinal	Vinegar
Cyclohexane	Phosphoric Acid, 30%	Water, Mineral Water
Diethylene Glycol	Photographic Baths	Wax Polish
Epoxy Adhesives	Polishing Compounds	Wine
Ethyl Alcohol, 15%	Potassium Bromate	Zinc Sulfate
Ethylene Glycol E	Potassium Bromide	
Fatty Acids @ 25°C	Potassium Chlorate	
Ferric Chloride, Aqueous, 10%	Potassium Dichromate, 10%	
Formaldehyde, Aqueous, 40%	Potassium Permanganate	
Fruit Juice	Potassium Sulfate	
Glycerol, Glycerine	Power Steering Fluid	
Heptane	Propylene	
Hexane @ 25°C	Salicyclic Acid @ 25°C	