

The following list identifies certain chemicals that can be found in end user facilities and are known to impact the integrity of one or various materials used by Orion in their luminaires. This list only identifies the most common chemicals and is not meant to be an all-inclusive list of every chemical that will have a negative effect on our luminaires.

Orion does not state or warranty chemical compatibility with our products. There are many variables that play a role in chemical compatibility and we choose to refrain from liability. Site testing the fixtures is the only way to know for certain if there will be a compatibility issue in the specific environment.

Orion will provide to the best of our knowledge the type of materials we use to manufacture our luminaires. It will be up to the end user to make the determination if the product is acceptable or not. For additional information please contact Orion representative.

Electronic Components Compatibility Issues	
Acetic Acid (acid)	Hydrochloric acid (acid)
Acrylic Rubber	Methyl ethyl ketone (MEK) (solvent)
Acetone	Methyl isobutyl ketone (MIBK) (solvent)
Acrylonitrile butadiene styrene (ABS)	Mineral spirits (solvent)
Ammonia (alkaline)	Nitric acid (acid)
Benzene (solvent)	Petroleum (oil/lubricant)
Butadiene rubber	Potassium hydroxide (alkaline)
Butyl rubber	Silicone oil (oil/lubricant)
Chlorinated polyethylene	Sodium hydroxide (alkaline)
Chlorobutyl	Sulfuric acid (acid)
Chlorosulphonated rubber	Tetrachloromethane (solvent)
Cyanoacrylate (adhesive)	Tetradecylamine
Dichloromethane (solvent)	Toluene (solvent)
Epichlorhydrin	Trimethylhexamethylene diamine
Gasoline (solvent)	Xylene (solvent)
Halogenated hydrocarbons (containing F, Cl, Br elements)	

Acrylic Chemical Compatibility Issues	
Acetaldehyde	Ethylene Chloride
Acetates	Ethylene Dibromide
Acetic Acid, 50%+	Ethylene Oxide (Moist)
Acetic Anhydride	Fluorides
Acetone	Formic Acid
Acetonitrile	Fuels w/ Benzene (Gasoline)
Acetophenone	Glycol
Acrylic Paints	Hydrofluoric Acid
Alcohol, Allyl	Hydrochloric Acid, 40%+
Alcohol, Amyl	Hydrogen Peroxide, 40%+
Alcohol, Benzyl	Iron Perchloride
Alcohol, Butyl (Butanol)	Isocane
Alcohol, Ethyl (Ethanol), 50%+	Ketones

Acrylic Chemical Compatibility Issues Cont.	
Alcohol, Isopropyl	Lacquer Thinner
Alcohol, Methyl (Methanol), 10%+	Lactic Acid Butyl Ester
Aluminum Hydroxide	Mercury Chloride
Amyl Acetate	Meta-Cresol
Ammonia @ 40°C+	Methyl Benzoate
Aniline	Methyl Chloride
Aromatic Solvents	Methyl Cyclohexanol
Aviation Fuel (100 Octane)	Methyl Naphthalene
Benzaldehyde	Methyl Salicylate
Benzene	Methylamine
Benzoic Aldehyde	Methylene Dichloride
Bituminous Emulsions	Mineral Oil @ 40°C+
Brake Fluid	Nail Polish
Bromine Gas	Naphtha
Butraldehyde	n-butyric Acid, 100%
Butyl Acetyl Ricinoleate	Nitric Acid, 40%+
Butyl Lactate	Nitrobenzene
Butyl Stearate	Nitrocellulose
Carbolic Acid	n-Octane
Carbon Disulfide	Oleum
Carbon Tetrachloride	Organic Solvents
Cellulose Paints	Paint Removers
Chlorinated Hydrocarbons	Paint Thinner
Chlorinated Solvents	Perchloroethylene
Chlorine Gas	Petroleum Ether (100-120°C)
Chlorophenol	_ Phenols
Chromic Acid	Phosphoric Acid, 95%
Cinnamon Oil	Phosphoric Trichloride
Cloves	_ Phthalates
Cosmoline Removers	Pyridine
Cresol	Salicylic Acid
Cyclohexane	Silicon Tetrachloride
Cyclohexanone	Sodium Phosphate
Cyclohexene	Sulfoxides
Diacetone Alcohol	Sulfur Dioxide, Liquid
Diamyl Phthalate	Sulfuric Acid, 65% @ 40°C+
Dibutyl Sebacate	Sulfurous Acid, Concentrated
Diethyl Ether	Tincture of Iodine, 5%
Dimethyl Formamide	Toluene

Acrylic Chemical Compatibility Issues Cont.

Dibutyl Sebacate	Sulfurous Acid, Concentrated
Diethyl Ether	Tincture of Iodine, 5%
Dimethyl Formamide	Toluene
Dioctyl Sebacate	Transformer Oil
Dioxane	Trichloroethane
Ether	Trichloroacetic Acid
Ethyl Acetate	Trichloroethylene
Ethyl Bromide	Turpentine
Ethyl Butyrate	Vegetable Oil
Ethylene Bromide	Xylene

Polycarbonate Chemical Compatibility Issues

Acetaldehyde, 100%	Ethylene Oxide
Acetates	Freon
Acetic Acid, Glacial, 100%	Fuels w/ Benzene (Gasoline)
Acetic Anhydride	Glass Cleaners
Acetone	Hydrochloric Acid, 25%+
Acetonitrile	Hydrofluoric Acid
Acetophenone	Hydrogen Peroxide, 40%+
Alcohol, Allyl	Isoctane
Alcohol, Amyl	Kerosene
Alcohol, Benzyl	Ketones
Alcohol, Ethyl (Ethanol), 50%	Lacquer Thinner
Alcohol, Isopropyl, 100%	Lactic Acid Butyl Ester
Alcohol, Methyl (Methanol), 50%	Meta-Cresol
Aluminum Hydroxide	Methyl Benzoate
Amines	Methyl Chloride
Ammonia	Methyl Cyclohexanol
Ammonium Hydroxide	Methyl Ethyl Ketone
Amyl Acetate	Methyl Naphthalene
Aniline	Methyl Salicylate
Aromatic Hydrocarbons	Methylamine
Aviation Fuel	Methylene Dichloride
Benzaldehyde	Mineral Oil @ 40°C+
Benzene	Mineral Spirits
Benzoic Aldehyde	Nail Polish
Brake Fluid	Naphtha (Petroleum Ether)
Bromine	Naphthenic Acids
Butadiene	n-butyric Acid, 100%
Butane	Nitric Acid, 25%+

Polycarbonate Chemical Compatibility Issues Cont.	
Butane	Nitric Acid, 25%+
Butyl Acetyl Ricinoleate	Nitrobenzene
Butyl Stearate	n-Octane
Calcium Hypochlorite	Oleum
Carbolic Acid	Paint Removers
Carbon Disulfide	Paint Thinner
Carbon Tetrachloride	Perchlorethylene
Cellulose Paints	Phenols
Chlorinated Hydrocarbons	Phenol, Aqueous, 5%
Chlorinated Solvents	Phthalates
Chlorine	Potassium Hydroxide (Potash)
Chlorophenol	Propane
Diacetone Alcohol	Pyridine
Chromic Acid	Sodium Hydroxide
Clove Oil	Sodium Hypochlorite, 30%
Cosmoline Removers	Sodium Nitrate
Cresol	Sodium Sulfide
Cutting Fluids and Oils	Sulfoxides
Cyclohexanone	Sulfur Dioxide
Cyclohexene	Sulfuric Acid, 70%+
Diamyl Phthalate	Sulfurous Acid
Dibutyl Sebacate	Tea
Diethyl Ether	Tincture of Iodine, 5%
Dimethyl Formamide	Toluene
Diethyl Sebacate	Transformer Oil
Dioxane	Trichloroacetic Acid
Ether	Trichloroethane
Ethyl Acetate	Trichloroethylene
Ethyl Alcohol, Concentrated	Triethanolamine
Ethyl Bromide	Turpentine
Ethyl Butyrate	Urea
Ethylene Bromide	Xylene
Ethylene Dibromide	