CHEMICAL RESISTANCE

OF PLASTICS: 376 AND 379 SERIES

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Since many of LDPI's components are made of plastic materials, their resistance against chemical products may be limited or even nil. Consult this list before using aggressive detergents, disinfectants, or installing the luminaire in chemically hazardous areas (such as car washes, swimming pools, industrial kitchens, industrial laundries, slaughterhouses, livestock containment facilities, etc...) or in case of doubt, please contact us. For these conditions, appropriate products (like stainless steel latches, etc...) are available.

WARNING: The information in this chart has been supplied to LDPI, Inc. by other sources and is to be used ONLY as a guide in selecting light fixtures for appropriate chemical compatibility. Before permanent installation, test the light fixture with the chemicals and under specific conditions of your application. Variations in chemical behavior/handling due to factors such as temperature, pressure and concentrations can cause failure even though it passed an initial test.

CHEMICAL	ACRYLIC	POLYCARBONATE	FIBERGLASS
ACIDS (Weak up to 10%)	+/-	+	+
ACIDS			
Acetic (max 30%)	-	+/-	+
Hydrochloric (max 20%)	+	+/-	+/-
Nitric (max 20%)	+/-	+/-	+/-
Sulphuric (max 50%)	+/-	+/-	-
Phosphoric	-	+/-	-
Hydrobomic	-	-	-
Accumulator Acid	+/-	+/-	+/-
BASES (Weak)			
Ammonia (max 25%)	+	-	+
BASES (Concentrated)			
Ammonia (max 50%)	+/-	-	+/-
Sodium Hydroide	+/-	-	-
SALT SOLUTIONS			
Common Salt	+	+/-	+
Metal Salt	+	+/-	+
Soda	+	+/-	+
HYDROCARBONS			
Aliphatic	+/-	+	+/-
Aromatic	-	-	+/-
Parafins	+	+	+
Carbon Dioxide, Carbon Monoxide	+	+	+
Ethyl Acetate	-	-	-
Pyridine	-	-	-
CHLORIDE HYDROCARBONS			
Carbon Tetrachloride	-	-	+/-
Trichlorethylene	-	-	-
Methylene Chloride	-	-	-
ALCOHOLS			
Up to 30%	+/-	+/-	+
Concentrated	-	-	+/-
Methanol, Ethanol, Phenol	-	-	+/-
ETHERS			
Ether	+/-	-	+/-
Petroleum Ether	+	+/-	+/-
AROMATIC HYDROCARBONS			
Aniline	+/-	-	+/-
Benzene and derivates	-	-	-
Hydrogen Peroxide	+/-	+/-	-
Xylene	-	-	-
OILS AND FATS			
Petrol, Kerosene	+/-	+/-	+
Mineral oil	-	+/-	+
Vegetable oils (hot)	+	-	+
Cooking fats (hot)	+	-	+
UNSATURATED CHLORIDE HYDROCARBONS			
Chloroform	-	-	-

+ = Resistant
+/- = Limited resistant
- = Not resistant

In case of limited resistance to corrosion (+/-) the use of polycarbonate clips is not suggested. We do advise the use of stainless steel latches if there is any uncertainty.

CHEMICAL RESISTANCE

SPECIFIC TO THE 384 SERIES

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	LENS MATERIAL			GASKET	FIXTURE BODY
CHEMICALS	GLASS	ACRYLIC (SHEET)	POLYCARBONATE	NEOPRENE	ALUMINUM
Acetic Acid	A	D	A	D	D
Acetone	A	D	D	D	A
Aluminum Chloride	A	A	A	A	D
Aluminum Sulfate	A	A	A	A	D
Ammonium Nitrate	A	A	D	A	B
Boric Acid (10%)	A	A	A	A	B
Brake Fluid	A	D	D	D	A
Calcium Chloride	A	A	A	A	C
Carbon Tetrachloride	A	D	D	D	A
Chlorine Water	A	A	D	A	B
Citric Acid	A	A	A	D	D
Cutting Fluid	A	A	A	A	D
Distilled Water	A	A	A	A	B
Ethyl Alcohol	A	D	A	A	A
Ethylene Glycol	A	A	A	A	A
Hydrolic Oil	A	A	B	D	A
Hydrochloric Acid (25%)	A	A	A	B	D
Isopropyl Alcohol	A	A	A	A	A
Kerosene	A	A	B	D	A
Liquid Soap	A	A	A	A	B
Methylene Chloride	A	D	D	D	A
Mineral Spirits	A	A	B	D	A
Motor Oil	A	A	A	D	A
Nitric Acid	A	A	C	D	D
Phosphoric Acid (25%)	A	A	A	A	D
Potassium Chloride (25%)	A	A	A	A	C
Sea Water	A	A	A	A	C
Sodium Chloride (25%)	A	A	A	A	B
Sulfuric Acid (25%)	A	A	A	D	D
Tanic Acid (10%)	A	A	A	A	D
Toluene	A	D	D	D	A
Turpentine	A	A	A	D	A
Unleaded Gasoline	A	A	D	D	A
Xylene	A	D	D	D	A

A. Recommended Material for long term exposure.
B. Satisfactory performance, functional after long term exposure, but cosmetic damage will occur.
C. Short duration exposure only, subject to chemical attack and will deteriorate.
D. Continuous exposure will cause deterioration of material.
Cleaning recommended if used in area containing chemicals.