

RESISTANCE TO CHEMICALS



Since the aggressive agents in liquid or gas form can destroy the plastic parts of the lighting fixtures, increased attention must be paid to the selection of the proper materials. The following table will help in this selection. It contains the most frequently used chemicals.

It is recommended to consult the LUG Light Factory Technical Department before any product is selected for potentially chemically aggressive applications.

PMMA	PC	GRP	CHEMICALS	PMMA	PC	GRP	CHEMICALS
DIFFUSER	DIFFUSER HOUSING	HOUSING		DIFFUSER	DIFFUSER HOUSING	HOUSING	
●	●	●	ALCOHOLS	●	●	●	INORGANIC ACIDS
●	●	●	Alcohol up to 30%	●	●	●	Battery acid
●	●	●	Alcohol concentrate	●	●	●	Bromic acid
●	●	●	Methanol	●	●	●	Hydrochloric acid up to 20%
●	●	●	Glycerine	●	●	●	Hydrochloric acid over 20%
●	●	●	Glycol	●	●	●	Nitric acid up to 10%
			AQUEOUS SOLUTIONS	●	●	●	Nitric acid between 10% and 20%
●	●	●	Sea water	●	●	●	Nitric acid over 20%
●	●	●	Hydrogen Peroxide up to 40%	●	●	●	Sulphydic acid
●	●	●	Hydrogen Peroxide over 40%	●	●	●	Sulphuric acid up to 50%
●	●	●	Metal salts and their aqueous solutions	●	●	●	Sulphuric acid up to 70%
●	●	●	Salt solutions	●	●	●	Sulphuric acid over 70%
			GASES	●	●	●	Sulphurous acid up to 5%
●	●	●	Carbon dioxide	●	●	●	ORGANIC ACIDS
●	●	●	Carbon monoxide	●	●	●	Acetic acid up to 5%
			HYDROCARBONS	●	●	●	Acetic acid up to 30%
●	●	●	Benzene	●	●	●	Butyric acid
●	●	●	Diesel oil	●	●	●	Citric acid
●	●	●	Petroleum Ether	●	●	●	Lactic acid
●	●	●	Aliphatic Hydrocarbons	●	●	●	BASIC COMPOUNDS
●	●	●	Aromatic Hydrocarbons	●	●	●	Ammonia 0,005% *
			OILS	●	●	●	Milk of lime
●	●	●	Aniline	●	●	●	Synthetic basic compounds
●	●	●	Machine-tool oils	●	●	●	Sodium hydroxide up to 2%
●	●	●	Diesel oil	●	●	●	Sodium hydroxide up to 10%
●	●	●	Brake oil	●	●	●	SOLVENTS
●	●	●	Flammable acid oils	●	●	●	Acetone
●	●	●	Camphor oil	●	●	●	Ketone
●	●	●	Lubricating oil	●	●	●	Chlorofenol
●	●	●	Silicone oil	●	●	●	Chloroform
●	●	●	Paraffin oil	●	●	●	Methylene Chloride
●	●	●	Saturated mineral oil	●	●	●	Dioxane
				●	●	●	Ether
				●	●	●	Ethyl Acetate
				●	●	●	Phenol
				●	●	●	Methyl-ethyl ketone
				●	●	●	Turpentine
				●	●	●	Pyridine
				●	●	●	Carbon tetrachloride
				●	●	●	Xylene

LEGEND

- Resistant
- Limited resistance
- Not resistant
- * Occupational Exposure Limit - EC (2000)