

## Resistance to chemical agents

Chemical agents	Polyester	Polycarbonate	Aluminium	PMMA	Stainless steel
Acetic acid 10%	✓	✓	✓	✓	✓
Acetone	∅	X	✓	X	✓
Alcoholic beverages	✓	✓	✓	∅	✓
Aluminium sulphate	✓	✓	✓	✓	∅
Ammonia 5%	∅	X	✓	✓	✓
Aniline	∅	X	✓	X	✓
Arsenic acid 20%	∅	✓	✓	✓	✓
Benzene	X	X	✓	X	∅
Bencylic alcohol	X	X	∅	X	∅
Bromine	X	X	X	X	X
Calcium Chloride	✓	✓	✓	✓	∅
Calcium nitrate	✓	✓	✓	✓	∅
Carbon tetrachloride	X	X	✓	X	∅
Carbonic acid	✓	X	✓	X	✓
Caustic potash 5%	X	X	X	✓	∅
Cement	✓	✓	✓	✓	∅
Hydrochloric acid 1-5%	∅	✓	X	✓	X
Chlorine liquids (vapours)	X	X	X	X	∅
Chloroform	X	X	✓	X	✓
Chromic acid	X	∅	X	∅	∅
Citric acid 20%	✓	✓	✓	✓	∅
Copper sulphate	✓	✓	X	✓	∅
Diesel-naphta oil	✓	∅	✓	✓	✓
Ethyl alcohol 30%	✓	✓	✓	∅	✓
Ethyl chloride	X	X	∅	X	✓
Ethyl ether	✓	X	✓	X	∅
Food oils and fats	✓	X	✓	✓	✓
Formic acid 10%	∅	✓	X	✓	∅
Glycerine	✓	✓	✓	✓	✓
Hexane	∅	✓	✓	✓	✓
Iodine	✓	X	∅	✓	X
Isopropylic alcohol	✓	∅	✓	∅	∅
Lubricating oil	✓	✓	✓	✓	✓
Magnesium sulphate	✓	✓	✓	✓	✓
Methanol	✓	X	✓	∅	✓
Mineral oils	✓	✓	✓	✓	✓
Nitric acid 20%	X	∅	X	✓	✓
Oxygen	✓	✓	✓	✓	✓
Ozone	✓	✓	✓	✓	∅
Perchloric acid 10%	X	✓	X	✓	X
Petrol	✓	X	✓	✓	✓
Phenol	∅	X	✓	X	∅
Potassium bromide	✓	✓	∅	✓	∅
Potassium nitrate	✓	✓	✓	✓	∅
Potassium permanganate	✓	✓	✓	✓	∅
Sea climate	✓	✓	∅	✓	∅
Silicon oils	✓	✓	✓	∅	✓
Soda bleach 15%	✓	X	∅	✓	∅
Sodium chloride	✓	✓	∅	✓	∅
Sodium hydroxide 5%	✓	X	X	✓	∅
Sodium sulphate	✓	✓	✓	✓	∅
Sugar	✓	✓	✓	✓	✓
Sulphur	✓	✓	✓	✓	∅
Sulphuric acid 30%	X	✓	X	✓	X
Toluene	X	X	✓	X	✓
Trichloroethylene	X	X	✓	X	∅
Zinc sulphate	✓	✓	∅	✓	∅

✓ Resistant

∅ Relatively resistant

X Non-resistant

This is a recommendation about the compatibility of equivalent or similar chemical agents included in the composition of the cleaning products with the polymers present in the luminaires. It is based on information from material suppliers, available documentation, tests and our experience in different applications.

Materials resistance can be also affected by concentration, temperature, presence of various chemicals, solvent evaporation and other factors, so this table must be considered as a general reference. Product compliance must be determined by the customer for each specific use.