TABLE OF RESISTANCE

POLYMERS USED IN LUMINAIRE PRODUCTION

Polymer components have become important and proven functional elements in modern luminaire production. They are chosen, processed and used according to the latest technical knowledge.

If luminaires are installed and used according to the instructions, these polymer components will age normally, ensuring consistent reliability. However, inadmissible stress and exposure to damaging influences reduce the ageing resistance of these parts, which means that the serial polymer components wear much faster.

Please do not hesitate to contact us if you have any problems.

This table contains a list of materials that are most commonly used in the production of NORKA luminaires. The chemical resistances indicated are guide values only and apply to an ambient temperature of

KEY:

■ resistant
□ limited resistance
— not resistant

Chemical substances, alphabetical	Phenolic resin Moulding material	Acrylic glass PMMA	Polycarbonate PC	Polyester	PBT/ Aluminium
Acetone	■	—	—	—	■
Ether	■	—	—	—	■
Alcohol, max. 30%	■	■	■	■	□
Alcohol, concentrated	■	—	—	□	■
Ammonia	■	■	—	□	■
Aniline	—	—	—	—	■
Benzol	■	—	—	—	□
Chloroform	■	—	—	—	■
Acetic acid, max. 5%	■	□	■	■	□
Acetic acid, max. 30%	—	—	—	■	—
Ethylacetate	■	—	—	—	■
Glycerine	■	■	□	■	■
NaCl solution	■	■	■	■	■
Hydrocarbons	■	□	—	□	■
Synthetic alkaline solutions	■	■	□	■	□
Sea water	■	■	■	■	□
Methyl chloride	■	—	—	—	□
Sodium hydroxide 2 %	■	■	—	□	—
Sodium hydroxide 10%	■	■	—	—	—
Normal petrol	■	■	□	■	■
Petroleum ether	■	■	□	■	■
Phenol	□	—	—	—	□
Nitric acid, max. 10%	■	■	■	■	—
Nitric acid, max. 20%	□	□	□	□	—
Hydrochloric acid, max. 15%	■	■	■	■	□
Hydrochloric acid, min. 20%	■	■	—	■	—
Sulphur dioxide	■	—	□	□	□
Sulphuric acid, max. 50%	■	■	■	■	—
Sulphuric acid, max. 70%	■	□	□	■	—
Soda	■	■	■	■	—
Premium petrol	■	■	—	■	■
Carbon tetrachloride	■	—	—	■	■
Oil of turpentine	■	□	□	■	■
Trichloroethylene	■	—	—	—	■
Hydrogen sulphide	■	■	■	■	■

Damaging influence	Possible cause	Effect
Inadmissibly high temperature	- excessive operating voltage - excessive ambient temperature - improper mounting	- deformation - embrittlement - discolouration
Short wave UV radiation	- high pressure mercury lamps with excessive UV radiation component - germicidal lamps	- yellowing - embrittlement
Aggressive substances	- softening agents (released from cable insulation etc.) - use of unsuitable cleaning agents and disinfectants	- crack formation - reduced stability - surface damage