ARAGON FIT
CHEMICAL RESISTANCE OF MATERERIALS

TRILUX
SIMPLIFY YOUR LIGHT.

- ●●● **Resistant**
  Negligible, reversible or no changes in mass and dimensions.
- ●● **Limited resistance**
  Considerable dimensional changes, and possibly irreversible changes in properties after prolonged contact. Consultation advisable before use.
- ● **Not resistant**
  May be used under certain conditions (brief contact) / soluble or attacked after brief contact
- – **No test carried out/no information currently present**

Chemical resistance of the materials	Poly-carbo-nate (PC)	PMMA (PMMA)	Poly-amide (CR)**
Acetaldehyde 40% aq. soln.	–	–	●●
Acetamide 50% aq. soln.	–	–	●●●
Acetic acid 40% aq. soln.	–	–	●
Acetic acid to 30%	●●	●	–
Acetic acid 10% aq. soln.	–	–	●●
Acetic acid to 5%	●●●	●●	●●●
Acetic acid technically pure	–	–	●
Acetic anhydride technically pure	–	–	●
Acetone	●	●	●
Alcohol to 30%	●●●	●●●	–
Aliphatic hydrocarbons	●●●	●●	–
Allyl alcohol technically pure	–	–	●
Aluminium salts*, aq. soln.	–	–	●●●
Alums*, aq. soln.	–	–	●●●
Ammonia 10% aq. soln.	–	–	●●●
Ammonia 25%	●	●●●	–
Ammonia*, gaseous	–	–	●●●
Ammonium chloride 10% aq. soln.	–	–	●●●
Ammonium salts*, technically pure	–	–	●●
Amyl acetate technically pure	–	–	●●●
Amyl alcohol technically pure	–	–	●
Aniline	●	●	●
Anisole technically pure	–	–	●●●
Aqua regia technically pure	–	–	●
Aromatic hydrocarbons	●	●	–
Aspirin technically pure	–	–	●●●
Attar of roses (Rose oil) technically pure	–	–	●
Barium salts*, aq. soln.	–	–	●●●
Battery acid 36 % aq. soln.	–	–	●●
Battery acids	●●●	●●●	●●
Beer	●●●	●●●	●●●
Benzaldehyde technically pure	–	–	●
Benzoic acid*, aq. soln.	–	–	●●
Benzene technically pure	–	–	●●●
Benzine (white spirit)	●●●	●●●	–
Benzol	●	●	–
Benzyl alcohol technically pure	–	–	●
Bitumen commercial grade	–	–	●●●
Blood	●●●	●●●	–
Borax*, aq. soln.	–	–	●●●

Chemical resistance of the materials	Poly-carbo-nate (PC)	PMMA (PMMA)	Poly-amide (CR)**
Boric acid 10% aq. soln.	–	–	●●
Brake Fluid (DOT 4)	–	–	●●●
Brandy	–	–	●●
Bromic acid	●	●	–
Bromine*	–	–	●
Butane technically pure	–	–	●●●
Butanol technically pure	–	–	●
Butter commercial grade	–	–	●●●
Butter milk commercial grade	–	–	●●●
Butyl acetate technically pure	–	–	●●●
Butyric acid technically pure	–	–	●●
Butylene glycol technically pure	–	–	●
Calcium chloride 10% aq. soln.	–	–	●●●
Calcium chloride 20% alcoholic soln.	–	–	●
Camphor technically pure	–	–	●●●
Carbon dioxide	●●●	●●●	–
Carbon disulphide 100%	–	–	●●●
Carbon monoxide	●●●	●●●	–
Carbon tetrachloride	●	●	●●●
Caustic soda 40% aq. soln.	–	–	●●●
Chlorinated lime*, aq. soln.	–	–	●
Chlorine technically pure	–	–	●
Chlorine gas <5 %, gaseous	–	–	●
Chlorine water <5 %, aq. soln.	–	–	●
Chloroacetic acid 10%, technically pure	–	–	●
Chlorobenzene technically pure	–	–	●●
Chlorobrommethane technically pure	–	–	●
Chloroform	●	●	●
Chlorophenole	●	●	–
Chromic acid 10% aq. soln.	–	–	●
Chromic acid 1% aq. soln.	–	–	●
Chromic/sulphuric acid*, aq. soln.	–	–	●
Chromium salts*, aq. soln.	–	–	●●
Coca-Cola commercial grade	–	–	●●●
Cocoa commercial grade	–	–	●●●
Coffee commercial grade	–	–	●●●
Copper salts 10% aq. soln.	–	–	●●
Cresol technically pure	–	–	●
Concentrated alcohol	●●●	●	–
Cyclohexane technically pure	–	–	●●●

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Cyclohexanol technically pure	-	-	●
Cyclohexanone technically pure	-	-	●●●
Decalin technically pure	-	-	●●●
Descaling agent (amido sulphuric acid)	-	-	●●●
Dibutyl phthalate technically pure	-	-	-
Diesel oil, crude oil	●●	●●●	●●●
Diethyl ether technically pure	-	-	●●●
Dimethyl formamide technically pure	-	-	●
Dioctyl phthalate technically pure	-	-	●●●
Dioxane	●	●	●●
Edible fats and oils commercial grade	-	-	●●●
Ethanol technically pure	-	-	●
Ether	●	●	●●●
Ethyl acetate (ester)	●	●	●●●
Ethylene chloride technically pure	-	-	●
Ethylene gycol / water 1:1 (coolant)	-	-	●●●
FAM B technically pure	-	-	●
Formaldehyde (Formalin) 40% aq. soln.	-	-	●●
Formamide technically pure	-	-	●●
Formic Acid	-	-	●●
Formic Acid 10% aq. soln.	-	-	●●
Formic Acid 40% aq. soln.	-	-	●
Formic Acid 85 % aq. soln.	-	-	●
Freon partially halogenized commercial grade	-	-	●
Freon fully halogenized commercial grade	-	-	●●●
Freon 12 technically pure	-	-	●●●
Freon 22 technically pure	-	-	●
Fruit juices commercial grade	-	-	●●●
Fuel C free from lead technically pure	-	-	●●●
Fuel oil technically pure	-	-	●●●
Furfurol technically pure	-	-	●●
Glycerine	●●	●●●	●●●
Glycol	●●●	●●●	●●●
Glysanthin	●●●	●●●	-
Grease (mineral oil based & silicon oil based)	-	-	●●●
Grease (synthetic)	-	-	●●●
Heptane technically pure	-	-	●●●
Hexane technically pure	-	-	●●●
Hydraulic fluid commercial grade	-	-	●●●
Hydrochloric acid 1 % aq. soln.	-	-	●●●
Hydrochloric acid 10% aq. soln.	-	-	●●
Hydrochloric acid to 20%	●●●	●●●	●●●
Hydrochloric acid from 20%	●●	●●●	-
Hydrogen fluoride 40% aq. soln.	-	-	●
Hydrogen peroxide 2% aq. soln.	-	-	●●
Hydrogen peroxide 10% aq. soln.	-	-	●●
Hydrogen peroxide 30% aq. soln.	-	-	●
Hydrogen peroxide to 40%	●●	●	-
Hydrogen peroxide above 40%	●●	●●	-
Hydrogen sulphide <5 %, gaseous	-	-	●●●

Chemical resistance of the materials	Poly-carbo-nate (PC)	PMMA (PMMA)	Poly-amide (CR)**
Hydrogen sulphide	●●●	●●●	-
Ink commercial grade	-	-	●●●
Iodine tincture*, alcoholic soln.	-	-	●
Iron salts 20% aq. soln. neut.	-	-	●●
Iron salts 20% aq. soln. acid.	-	-	●
Isooctane technically pure	-	-	●●●
Isopropyl alcohol technically pure	-	-	●
Lysol	●	●	-
Ketones	●	●	-
Lactic acid 90% aq. soln.	-	-	●
Lactic acid 50% aq. soln.	-	-	●●
Lactic acid 5 % aq. soln.	-	-	●●●
Lanolin commercial grade	-	-	●●●
Lead salts technically pure	-	-	●●●
Lemon juice*, commercial grade	-	-	●●●
Linseed oil commercial grade	-	-	●●●
Liqueurs commercial grade	-	-	●●
Lubrications oils, greases, soaps commercial grade	-	-	●●●
Magnesium hydroxide 10% aq. soln.	-	-	●●●
Magnesium salts 10% aq. soln.	-	-	●●●
Mercury technically pure	-	-	●●●
Mercury salts*, aq. soln., neutral	-	-	●●
Methanol	●	●	●
Lime milk	●●	●●●	-
Metallic salts and there aqueous solutions	●●●	●●●	-
Methylene chloride	●	●	●
Methylethyl ketone technically pure	-	-	●
Milk commercial grade	-	-	●●●
Mineral oils commercial grade	-	-	●●●
Mineral Oil (IRM903)	-	-	●●●
Motor fuels commercial grade	-	-	●●●
Naphthalene technically pure	-	-	●●●
Nickel salts*, aq. soln.	-	-	●●●
Nitric acid to 10%	-	●●●	●
Nitric acid 10 to 20%	●●	●●	●
Nitric acid from 20%	●	●	●
Nitrobenzene technically pure	-	-	●●
Nitromethane technically pure	-	-	●●●
N-Hexane	-	-	●●●
Octane technically pure	-	-	●●●
Oil (No. 3 ASTM) commercial grade	-	-	●●●
Oil of lavendar commercial grade	-	-	●
Oil of pine needle technically pure	-	-	●●●
Oil of turpentine technically pure	-	-	●●●
Oleic acid technically pure	-	-	●●●
Oleum technically pure	-	-	●
Olive oil commercial grade	-	-	●●●
Oxalic acid 10% aq. soln.	-	-	●●●
Ozone*, gaseous	-	-	●
Ozone < 1ppm, gaseous	-	-	●●●

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Paraffin oil technically pure	-	-	●●●
Peanut oil commercial grade	-	-	●●●
Peppermint oil technically pure	-	-	●●
Perchlorethylene technically pure	-	-	●●●
Petrol (unleaded, Esso) commercial grade	-	-	●●●
Petroleum technically pure	-	-	●●●
Petroleum ether	●●	●●●	●●●
Phenol	●	●	●
Phenylethyl alcohol technically pure	-	-	●
Phosphoric acid 10% aq. soln.	-	-	●●
Phosphoric acid 50% aq. soln.	-	-	●
Plasticizers (phthalates, phosphates) commercial grade	-	-	●●●
Potash*, aq. soln.	-	-	●●●
Potassium bromide 10% aq. soln.	-	-	●●●
Potassium chlorate 7% aq. soln.	-	-	●●
Potassim Hydroxide (50%)	-	-	●●●
Potassium iodide 10% aq. soln.	-	-	●●●
Potassium nitrate 10% aq. soln.	-	-	●●●
Potassium permanganate 1% aq. soln.	-	-	●
Potassium sulphate 10% aq. soln.	-	-	●●●
Propane technically pure	-	-	●●●
Propanol technically pure	-	-	●
Pyridine	●	●	●●
Pyrocatechol 6 % aq. soln.	-	-	●
Resorcinol technically pure	-	-	●
Resorcinol*, alcoholic soln.	-	-	●
Rum commercial grade	-	-	●●
Salicylic acid technically pure	-	-	●●●
Saline solution	●●●	●●●	-
Seawater	●●●	●●●	-
Silicone oils technically pure	-	-	●●●
Silver salts*, aq. soln.	-	-	●●●
Soap solution 10% aq. soln.	-	-	●●●
Soap solution 10% aq. soln.	●●●	●●●	-
Soda	●●●	●●●	-
Sodium bicarbonate*, aq. soln.	-	-	●●●
Sodium bisulphite 10% aq. soln.	-	-	●●●
Sodium bromide 10% aq. soln.	-	-	●●●
Sodium carbonate 10% aq. soln.	-	-	●●●
Sodium chloride*, aq. soln.	-	-	●●●
Sodium chlorite 5% aq. soln.	-	-	●
Sodium hydroxide 10%	●	●●●	-
Sodium hydroxide 2%	●	●●●	-
Sodium hydroxide 40% aq. soln.	-	-	●●●
Sodium hypochlorite 5% aq. soln.	-	-	●

Chemical resistance of the materials	Poly-carbo-nate (PC)	PMMA (PMMA)	Poly-amide (CR)**
Sodium nitrate 10% aq. soln.	-	-	●●●
Sodium nitrite 5 % aq. soln.	-	-	●
Sodium perborate 5 % aq. soln.	-	-	●●
Sodium phosphate 10% aq. soln.	-	-	●●●
Sodium sulphate 10% aq. soln.	-	-	●●●
Sodium sulphide 10% aq. soln	-	-	●●●
Sodium sulphite 10% aq. soln.	-	-	●●●
Sodium thiosulphite 10% aq. soln.	-	-	●●●
Soya oil commercial grade	-	-	●●●
Starch*, aq. soln.	-	-	●●●
Styrene technically pure	-	-	●●●
Sugar*, aq. soln.	-	-	●●●
Sulphur technically pure	-	-	●●●
Sulphur dioxide <5 %	-	-	●●
Sulphuric acid 2% aq. soln.	-	-	●●●
Sulphuric acid 10% aq. soln.	-	-	●●
Sulphuric acid 36% aq. soln	-	-	●●
Sulphuric acid to 50%	●●	●●●	-
Sulphuric acid to 70%	●●	●●	-
Sulphuric acid from 70%	●	●	-
Sulphuric acid technically pure	-	-	●
Sulphurous acid to 5%	●	●●	-
Synthetic washing solution	●●	●●●	-
Table salt*, aq. soln.	-	-	●●●
Tallow commercial grade	-	-	●●●
Tar technically pure	-	-	●●●
Tartaric acid technically pure	-	-	●●●
Tea commercial grade	-	-	●●●
Tetrahydrofuran technically pure	-	-	●●
Tetralin technically pure	-	-	●●●
Thionyl chloride technically pure	-	-	●
Toluene technically pure	-	-	●●●
Trichlorethylene technically pure	-	-	●●
Turpentine oil	●●	●●	-
Urea 20% aq. soln.	-	-	●●
Vaseline commercial grade	-	-	●●●
Vinegar commercial grade	-	-	●●●
Water to 60°	●●●	●●●	●●●
Water glass*, aq. soln.	-	-	●●●
Wax commercial grade	-	-	●●●
Wine commercial grade	-	-	●●●
Xylene technically pure	-	-	●●●
Xylol	●	●	-
Zinc chloride 10% aq. soln.	-	-	●●●

* signifies data valid for all concentrations

** The chemical resistance was established by exposing test samples, to each of the chemicals for a period of 12 months at room temperature.

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- ●●● **Resistant**
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  Considerable dimensional changes, and possibly irreversible changes in properties after prolonged contact. Consultation advisable before use.
- ● **Not resistant**
  May be used under certain conditions (brief contact) / soluble or attacked after brief contact

Cleaning agents, disinfectants and coolants	Polycarbonate (PC TX)	PMMA (PMMA TX)	Polyamide (CR TX)
ACMOSIL 37-5504	●	●●●	●●●
Coolants QUAKERCOOL 7200 HBF	●	●●	●●●
Coolants QUAKERCOOL 7200 BFF	●	●●	●●●
Coolants QUAKERCOOL 7100 HD	●	●●	●●●
GORAPUR LI 2920-40 E	●	●	●●●
MV Quartacid plus from Schülke	●●●	●●●	●●●
MV Quartasept plus from Schülke o		●●●	●●●
MV perform classic alcohol IPA from Schülke	●●●	●●●	●●●
P3-topactive OKTO (desinfectant; acid solution with peroxide) from ECOLAB		●●●	●●●
P3-topax 66 (cleaner/desinfectant; alkaline with chlorine) from ECOLAB	●	●●●	●●●
P3-topactive 200 (cleaner, alkaline with tenside) from ECOLAB	●●	●●●	●●●
P3-topactive 500 (cleaner, acid solution with tenside) from ECOLAB	●●	●●●	●●●
P3-topax 990(neutral disinfectant; basis alkylaminacetat) from ECOLAB	●●	●●●	●●●
PU-5408H, PU-1706M, PU-5421H, PU-4111M from Chem-Trend	●	●	●●●
PU-HS-Antiblock 6291/21, A-PU-Antiblock 6/428-5 from Bomix	●	●	●●●

Suitable materials and temperature ranges	Polycarbonate (PC)	PMMA (PMMA)	Polyamide (CR)
Resistance to ageing of the material	very good	good	good
Flammability according to UL94 (ISO 60695)	not applicable	not applicable	not applicable
Food industry suitability via luminaire series certification (HACCP, IFS Version 6 and/or BRC Global Standard Food Version 7 certified	yes	yes	yes
Chemical resistance (ECOLAB certificate)	no	no	no
Glow wire test	850 °C	650 °C	850 °C
Halogen-free	yes	yes	yes
Suitability for use in agriculture (livestock farming – DLG cert.)	no	suitable, not certified yet	suitable, not certified yet
Impact resistance (IK rating)	IK08	IK03	IK07
Silicone-free	yes*	yes*	yes*

Disclaimer: The above overview does not include all available variants, e.g. including through-wiring or emergency lighting options available. Detailed information can therefore be found in the respective product data sheet.

General material statements

Polycarbonate (PC)	PMMA (PMMA)	Polyamide (CR)
The most mechanically robust luminaire in the portfolio	Highly transparent	Highly transparent
UV-stable and high impact resistant	Resistant against impacts, weather and UV-radiation weather and UV-radiation	High impact resistance and durability UV stable
Chemical resistant against alcohol, ethanol or hydrogen peroxide	Minimised risk of tension cracking	No tension cracks
	Chemical resistant against a variety of acids, alkalis, halogens, mineral oils, fats and oils	Highly translucent luminaire is also able to cope with alkalis, unorganic salts, solvents, fuels, fats and oils