

Cable Chemical Resistance

- Not tested
- ⊗ Good resistance
no to slight reaction
- ✖ Moderate resistance
slight to moderate reaction
- ✖ Low/no resistance
moderate to strong reaction

All tests were performed at a temperature of +20°C.

Chemical	ÖLFLEX® SMART 108, CLASSIC 100/110, SERVO 2YSLCY/9YSLCY	ÖLFLEX® FD 90/90 CY, 150 QUATTRO, 190, 890, 191/191 CY, FD, TRAY II, VFD cables, SERVO 709 CY, SERVO TC, AUTO-I, CONTROL TM/TM CY, FORTIS, SERVO cables per SEW® & SIEMENS® 6FX 5008, UNITRONIC® 300	ÖLFLEX® CLASSIC 110 SY/110 CY, 100 CY	PUR-jacketed cables: ÖLFLEX® CLASSIC 400 P/CP, 490 P, 540 P/CP, 590 P, SERVO 795 P, SERVO 796 CP, 855 P/CP, FD 891 P, ROBOT 900, F1, PUR S, CRANE PUR, SERVO cables per SIEMENS® FX 8 Plus, UNITRONIC® FD P, LIYD 11Y, FD CP/CP (TP), FD Plus, PUR; HITRONIC® POF (PUR)	ÖLFLEX® CRANE, round & flat	ÖLFLEX® CRANE 2S, LIFT F, POWER IX, H07RN-F, LIFY single core	ÖLFLEX® HEAT 180
Inorganic Chemicals							
Alums, cold-saturated concentration	⊗	⊗	⊗	—	⊗	⊗	⊗
Aluminum salts, any concentration	⊗	⊗	⊗	—	⊗	⊗	⊗
Ammonia, aqueous, 10% concentration	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Ammonium acetate, aqueous, any concentration	⊗	⊗	⊗	—	⊗	⊗	⊗
Ammonium carbonate, aqueous, any concentration	⊗	⊗	⊗	✖	⊗	⊗	—
Ammonium chloride, aqueous, any concentration	⊗	⊗	⊗	⊗	⊗	⊗	—
Barium salts, any concentration	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Boric acid, aqueous	⊗	⊗	⊗	✖	⊗	⊗	⊗
Calcium chloride, aqueous, cold-saturated concentration	⊗	⊗	⊗	✖	⊗	⊗	⊗
Calcium nitrate, aqueous, cold-saturated concentration	⊗	⊗	⊗	—	⊗	⊗	✖
Chromium salts, aqueous, cold-saturated concentration	⊗	⊗	⊗	⊗	⊗	⊗	—
Potassium carbonate, aqueous (potash)	⊗	⊗	⊗	—	✖	⊗	⊗
Potassium chlorate, aqueous, cold-saturated concentration	⊗	⊗	⊗	—	⊗	⊗	—
Potassium chloride, aqueous, cold-saturated concentration	⊗	⊗	⊗	✖	⊗	⊗	⊗
Potassium dichromate, aqueous	⊗	⊗	⊗	✖	⊗	⊗	⊗
Potassium iodide, aqueous	⊗	⊗	⊗	—	⊗	⊗	⊗
Potassium nitrate, aqueous, cold-saturated concentration	⊗	⊗	⊗	—	—	—	—
Potassium permanganate, aqueous	✖	✖	✖	✖	⊗	✖	⊗
Potassium sulfate, aqueous	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Copper salts, aqueous, cold-saturated concentration	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Magnesium salts, aqueous, cold-saturated concentration	⊗	⊗	⊗	✖	⊗	⊗	⊗
Sodium bicarbonate, aqueous (natron)	⊗	⊗	⊗	✖	⊗	⊗	⊗
Sodium bisulfate, aqueous	⊗	⊗	⊗	⊗	✖	⊗	⊗
Sodium chloride, aqueous (table salt)	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Sodium thiosulfate, aqueous (fixing salt)	⊗	⊗	⊗	✖	⊗	⊗	⊗
Nickel salts, aqueous, cold-saturated concentration	⊗	⊗	⊗	—	⊗	⊗	⊗
Phosphoric acid, 50% concentration	⊗	⊗	⊗	✖	⊗	⊗	✖
Mercury, 100% concentration	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Mercury salts, aqueous, cold-saturated concentration	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Nitric acid, 30% concentration	✖	✖	✖	✖	✖	✖	✖
Hydrochloric acid, concentrated	✖	✖	✖	✖	✖	✖	✖
Sulfur, 100% concentration	⊗	⊗	⊗	⊗	⊗	⊗	✖
Sulfur dioxide, gaseous	⊗	⊗	⊗	—	⊗	⊗	✖
Carbon disulfide	✖	✖	✖	✖	✖	✖	✖
Hydrogen sulfide	⊗	⊗	⊗	⊗	⊗	⊗	✖
Sea water	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Silver salts, aqueous	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Hydrogen peroxide, 3% concentration	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Zinc salts, aqueous	⊗	⊗	⊗	✖	⊗	⊗	✖
Tin(II) chloride	⊗	⊗	⊗	—	⊗	⊗	⊗
Organic Chemicals							
Ethanol, 100% concentration	✖	✖	✖	✖	⊗	✖	⊗
Formic acid, 30% concentration	✖	✖	✖	✖	⊗	✖	—
Petrol	✖	✖	✖	⊗	✖	✖	✖
Succinic acid, aqueous, cold-saturated concentration	⊗	⊗	⊗	⊗	⊗	⊗	—
Acetic acid, 20% concentration	✖	✖	✖	✖	⊗	⊗	⊗
Hydraulic oil	✖	✖	✖	✖	✖	✖	—
Isopropanol, 100% concentration	✖	✖	✖	✖	⊗	✖	✖
Machinery oil	✖	⊗	✖	⊗	✖	✖	✖
Methanol, 100% concentration	✖	✖	✖	✖	⊗	✖	⊗
Oxalic acid, aqueous, cold-saturated concentration	⊗	⊗	⊗	—	✖	⊗	✖
Cutting oil	✖	⊗	✖	⊗	✖	✖	—
Plant-based oils & fats	✖	⊗	✖	⊗	✖	✖	✖
Tartaric acids, aqueous	⊗	⊗	⊗	—	⊗	⊗	⊗
Citric acids	⊗	⊗	⊗	✖	⊗	⊗	⊗

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Chemical	TPE-jacketed cables; ÖLFLEX® HEAT 205/260, CRF, HF Tray Plus, SDP, AUTO-X, CONTROL M	Halogen-free cables; UNITRONIC® H-(S)H, NHXMH, HF TRAY	HITRONIC® fiber optic cables	ÖLFLEX® TC 600, POWER QUAD II, C304, D304, I304, UNITRONIC® 190, 100 CY, LiYY, LiYCY, Li2YCY (TP), Li2YCY PIMF, FD/FD CY, FD 890, computer cables; HITRONIC® FD/FD CY, POF (PVC)	ÖLFLEX® CRANE NSHTÖU, NSGAFÖU, CRANE ZS, H01N2-D, H05RN-F, H07RN-F, H07RN8-F	LiY single cores, H05V-K, H07V-K, LiFY, Multi-standard SC 1/SC 2.1	ÖLFLEX® ROBUST 200, 210, 215 C
Inorganic Chemicals							
Alums, cold-saturated concentration	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Aluminum salts, any concentration	⊗	✘	⊗	⊗	⊗	⊗	⊗
Ammonia, aqueous, 10% concentration	⊗	✘	⊗	⊗	—	⊗	⊗
Ammonium acetate, aqueous, any concentration	⊗	—	⊗	⊗	✘	⊗	⊗
Ammonium carbonate, aqueous, any concentration	⊗	—	⊗	⊗	⊗	⊗	⊗
Ammonium chloride, aqueous, any concentration	⊗	—	⊗	⊗	⊗	⊗	⊗
Barium salts, any concentration	⊗	✘	⊗	⊗	⊗	⊗	⊗
Boric acid, aqueous	⊗	✘	⊗	⊗	⊗	⊗	⊗
Calcium chloride, aqueous, cold-saturated concentration	⊗	✘	⊗	⊗	⊗	⊗	⊗
Calcium nitrate, aqueous, cold-saturated concentration	⊗	✘	⊗	⊗	⊗	⊗	⊗
Chromium salts, aqueous, cold-saturated concentration	⊗	—	⊗	⊗	⊗	⊗	✘
Potassium carbonate, aqueous (potash)	⊗	—	⊗	⊗	⊗	⊗	⊗
Potassium chlorate, aqueous, cold-saturated concentration	⊗	—	⊗	⊗	✘	⊗	⊗
Potassium chloride, aqueous, cold-saturated concentration	⊗	✘	⊗	⊗	⊗	⊗	⊗
Potassium dichromate, aqueous	⊗	—	⊗	⊗	⊗	⊗	⊗
Potassium iodide, aqueous	⊗	✘	⊗	⊗	⊗	⊗	⊗
Potassium nitrate, aqueous, cold-saturated concentration	—	✘	⊗	⊗	⊗	⊗	⊗
Potassium permanganate, aqueous	⊗	—	✘	✘	⊗	✘	⊗
Potassium sulfate, aqueous	⊗	✘	⊗	⊗	⊗	⊗	⊗
Copper salts, aqueous, cold-saturated concentration	⊗	✘	⊗	⊗	⊗	⊗	⊗
Magnesium salts, aqueous, cold-saturated concentration	⊗	✘	⊗	⊗	⊗	⊗	⊗
Sodium bicarbonate, aqueous (natron)	⊗	—	⊗	⊗	⊗	⊗	⊗
Sodium bisulfate, aqueous	⊗	—	⊗	⊗	⊗	⊗	⊗
Sodium chloride, aqueous (table salt)	⊗	✘	⊗	⊗	⊗	⊗	⊗
Sodium thiosulfate, aqueous (fixing salt)	⊗	—	⊗	⊗	⊗	⊗	⊗
Nickel salts, aqueous, cold-saturated concentration	⊗	✘	⊗	⊗	⊗	⊗	⊗
Phosphoric acid, 50% concentration	⊗	—	⊗	⊗	⊗	⊗	⊗
Mercury, 100% concentration	⊗	—	⊗	⊗	⊗	⊗	⊗
Mercury salts, aqueous, cold-saturated concentration	⊗	✘	⊗	⊗	⊗	⊗	⊗
Nitric acid, 30% concentration	⊗	✘	✘	✘	✘	✘	✘
Hydrochloric acid, concentrated	⊗	✘	✘	✘	✘	✘	✘
Sulfur, 100% concentration	⊗	⊗	⊗	⊗	⊗	⊗	✘
Sulfur dioxide, gaseous	⊗	—	⊗	⊗	⊗	⊗	⊗
Carbon disulfide	⊗	✘	✘	✘	✘	✘	✘
Hydrogen sulfide	⊗	—	⊗	⊗	⊗	⊗	✘
Sea water	⊗	✘	⊗	⊗	⊗	⊗	⊗
Silver salts, aqueous	⊗	✘	⊗	⊗	⊗	⊗	⊗
Hydrogen peroxide, 3% concentration	⊗	⊗	⊗	⊗	⊗	⊗	✘
Zinc salts, aqueous	⊗	✘	⊗	⊗	⊗	⊗	⊗
Tin(II) chloride	⊗	✘	⊗	⊗	⊗	⊗	⊗
Organic Chemicals							
Ethanol, 100% concentration	⊗	✘	✘	✘	⊗	✘	⊗
Formic acid, 30% concentration	⊗	✘	✘	✘	⊗	✘	—
Petrol	⊗	✘	✘	✘	✘	✘	✘
Succinic acid, aqueous, cold-saturated concentration	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Acetic acid, 20% concentration	⊗	✘	✘	✘	⊗	✘	⊗
Hydraulic oil	⊗	✘	✘	✘	✘	✘	✘
Isopropanol, 100% concentration	⊗	⊗	✘	✘	⊗	✘	⊗
Machinery oil	⊗	⊗	✘	✘	✘	✘	✘
Methanol, 100% concentration	⊗	✘	✘	✘	⊗	✘	⊗
Oxalic acid, aqueous, cold-saturated concentration	⊗	✘	⊗	⊗	✘	⊗	⊗
Cutting oil	⊗	✘	✘	✘	✘	✘	✘
Plant-based oils & fats	⊗	✘	✘	✘	✘	✘	✘
Tartaric acids, aqueous	⊗	✘	⊗	⊗	⊗	⊗	⊗
Citric acids	⊗	✘	⊗	⊗	⊗	⊗	⊗

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