

# Materials Compatibility in Dynalene LC-PG

Immersion testing of polymers and metals are performed in Dynalene LC-PG 50% for 5,000 hours at temperatures up to 90°C. After completion of testing, samples are analyzed at room temperature. The materials and fluid are deemed compatible and are recommended under the following conditions:

- Electrical conductivity and pH of the fluid are in the acceptable range.
- Materials show no sign of degradation such as strong discoloration, swelling, cracking, corroding or disintegrating into the fluid.
- Fluids demonstrate no strong discoloration or presence of particulates or odor.

Materials are classed as Recommended (R) or Not Recommended (NR).

Polymers	R	N R	Temperature
Teflon™ (PTFE)	X		80°C
Buna Nitrile	X		20°C
Polyurethane		X	
Viton™ (FKM)	X		50°C
Silicone	X		80°C
Ethylene propylene diene monomer (EPDM)	X		80°C
Neoprene	X		20°C (softening)
HDPE	X		80°C
LDPE	X		50°C
Polypropylene	X		80°C
Nylon		X	
Tygon®	X		20°C
Polyvinyl chloride (PVC)	X		80°C
Noryl™ PPO (polyphenylene oxide)	X		80°C
Polyphenylene sulfide (PPS)	X		80°C
Delrin® (homopolymer acetal)	X		80°C
Tecafon PVDF (polyvinylidene fluoride)	X		80°C
Graphite	X		80°C
Acrylic/ Methyl methacrylate	X		50°C
Acrylonitrile butadiene styrene (ABS)	X		80°C
Chlorinated polyvinyl chloride (CPVC)	X		50°C (fluid discoloration)
Polyether ether ketone (PEEK)	X		80°C
THV	X		20°C
Natural Rubber	X		50°C
Fluorinated ethylene propylene (FEP)	X		80°C
Polysulfone	X		80°C
Isobutylene-Isoprene Rubber (IIR)		X	≥80°C

Polymers (cont'd)	R	NR	Temperature
Styrene-Butadiene Rubber (SBR)	X		50°C (fluid discoloration)
Hydrogenated Acrylonitrile Butadiene Rubber (HNBR)	X		80°C (hardening)
EcoHydrin®	X		50°C (softening and swelling)
Polycarbonate	X		80°C (softening)
Fluorosilicone	X		80°C (hardening)

Metals	R	NR	Temperature
Stainless Steel	X		90°C
Aluminum	X		90°C
Brass	X		90°C
Copper	X		90°C
Greycast Iron		X	
Carbon Steel		X	

Note: This is a general compatibility chart for Dynalene LC-PG. In an actual system, an ion exchange cartridge will be removing any ions thereby keeping the fluid conductivity low. Dynalene understands that each customer requirement is different. We will work with you to identify your application needs and, if needed, provide you with additional information.

#### Product Disclaimer

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