

## Materials Compatibility in Dynalene LC-PG

Immersion testing is performed in Dynalene LC-PG 50% for 5,000 hours at temperatures up to 90°C for metals and 80°C for polymers. After completion of testing, all 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, 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	NR	Temperature
Teflon™ (PTFE)	Χ		80°C
Buna Nitrile	Х		50°C (fluid
buna Mitrile	۸		discoloration)
Polyurethane	Х		20°C (softening and
Foryurethane	^		swelling)
Viton™ (FKM)	Х		80°C (Fair)
Silicone	Χ		80°C (material leaching)
Ethylene propylene diene	х		80°C
monomer (EPDM)			
Neoprene	Х		20°C (softening)
High Density Polyethylene	Х		80°C
(HDPE)			
Low Density Polyethylene	Х		50°C
(LDPE)			
Polypropylene	Х		80°C
Nylon (PA66)	Х		50°C (surface cracking)
Nylon (PA12)	Х		50°C
Tygon <sup>®</sup>	Х		20°C
Polyvinyl chloride (PVC)	Х		80°C
Noryl™ PPO	Х		80°C
(polyphenylene oxide)	,,		
Polyphenylene sulfide	Х		80°C
(PPS)			
Delrin® (homopolymer	Х		80°C
acetal)			
Tecaflon PVDF	Х		80°C
(polyvinylidene fluoride)	V		0000
Graphite	Х		80°C
Acrylic/ Methyl	Х		50°C
methacrylate Acrylonitrile butadiene	Χ		
styrene (ABS)	^		80°C
Chlorinated polyvinyl	,,		5000
chloride (CPVC)	Х		50°C
Polyether ether ketone			00%
(PEEK)	Χ		80°C
Tetrafluoroethylene			
Hexafluoropropylene and	Х		20°C
Vinylidene Fluoride (THV)			
Natural Rubber	Х		50°C

Polymers (cont'd)	R	NR	Temperature
Fluorinated ethylene propylene (FEP)	X		80°C
Polysulfone	Χ		80°C
Isobutylene-Isoprene Rubber (IIR)	X		50°C (hardening)
Styrene-Butadiene Rubber (SBR)	X		50°C (fluid discoloration)
Hydrogenated Acrylonitrile Butadiene Rubber (HNBR)	X		80°C
EcoHydrin <sup>®</sup>	X		50°C (softening and swelling)
Polycarbonate	Χ		80°C
Fluorosilicone	Χ		80°C (hardening)
Metals	R	NR	Temperature
Stainless Steel	Х		90°C
Aluminum	Χ		90°C

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 electrical 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.

Χ

Χ

Χ

90°C

90°C

## **Product Disclaimer**

**Brass** 

Copper

Greycast Iron
Carbon Steel

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