

Materials Compatibility in Dynalene LC-EG

Immersion testing is performed in Dynalene LC-EG 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	Polymers (cont'd)	R	NR	Temperature
Teflon™ (PTFE)	X		80°C	Fluorinated ethylene propylene (FEP)	X		80°C
Buna Nitrile	X		50°C (fluid discoloration)	Polysulfone	X		80°C
Polyurethane	X		20°C (softening and swelling)	Isobutylene-Isoprene Rubber (IIR)	X		50°C
Viton™ (FKM)	X		80°C (Fair)	Styrene-Butadiene Rubber (SBR)	X		50°C (fluid discoloration)
Silicone	X		80°C (material leaching)	Hydrogenated Acrylonitrile Butadiene Rubber (HNBR)	X		80°C
Ethylene propylene diene monomer (EPDM)	X		80°C	EcoHydrin®	X		50°C (softening and swelling)
Neoprene	X		20°C (softening)	Polycarbonate	X		80°C
High Density Polyethylene (HDPE)	X		80°C	Fluorosilicone	X		80°C
Low Density Polyethylene (LDPE)	X		50°C	Metals	R	NR	Temperature
Polypropylene	X		80°C	Stainless Steel	X		90°C
Nylon (PA66)	X		50°C (surface cracking)	Aluminum	X		90°C
Nylon (PA12)	X		50°C	Brass	X		90°C
Tygon®	X		20°C	Copper	X		90°C
Polyvinyl chloride (PVC)	X		50°C	Greycast Iron		X	
Noryl™ PPO (polyphenylene oxide)	X		80°C	Carbon Steel		X	
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		50°C				
Chlorinated polyvinyl chloride (CPVC)	X		50°C				
Polyether ether ketone (PEEK)	X		50°C				
Tetrafluoroethylene Hexafluoropropylene and Vinylidene Fluoride (THV)	X		20°C				
Natural Rubber	X		50°C				

Note: This is a general compatibility chart for Dynalene LC-EG. 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.

Product Disclaimer

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