

AEON 500 and AEON 5000 MATERIALS COMPATIBILITY

The most meaningful evaluation of compatibility of an oil with various seals, plastics, paints, and metals is in actual field testing and customer usage. Our experience has shown that AEON 500 and AEON 5000 have performed equally as well as conventional, mineral oil based lubricants with seals, paints, metals, and plastics normally used in oil applications. We are not aware of any compatibility problems in either controlled tests or extensive service usage.

Elastomers:

Recommended (Superior Performance)

Nitrile (Buna N)
Epichlorohydrin
Poly Urethane
Fluorosilicone
Fluoroelastomer (Viton)
Polyacrylate
Phosphonitrilic Fluoroelastomer
Aflas (TFE) Propylene

Good (Performance equal to or better than conventional mineral oil lubricants)

Silicone
Chlorsosulfonate Polyethylene (Hypalon)
Neoprene
Polysulfide
Ethylene Acrylate (Vamac)

Not Recommended

Natural Rubber
Butadiene Styrene (SBR, Buna S)
Butyl Rubber
Ethylene Propylene (EDPM)

Paints:

Recommended

Epoxy
Oil Resistant Alkyd
Acrylic Enamel

Gardner Denver
Master Distribution Center
5585 East Shelby Drive, Memphis, TN
Phone: (901) 542-6100 FAX: (901) 542-6159

Not Recommended

Latex

Water solvent Based Paints

Note: There are many paints available for industrial use. Generally, paints recommended for use in oil environments are suitable for use with AEON 500 and AEON 5000.

Plastics:**Recommended**

Fluorocarbon

Nylon

Delrin

Celcon

Polyethylene

Polycarbonate

Polystyrene

PVC

ABS

The very low volatility characteristics of AEON 500 and AEON 5000 will greatly reduce the oil carried over into air lines and equipment and therefore reduce the possibility of compatibility problems in the air line.

TYPICAL TEST RESULTS

Elastomer Swell, ASTM D-471, 158°F (70°C), 168 hrs, % Volume Swell

	DIESTER OIL	PAO OIL
Buna N	6.9	0.7
Neoprene	50.5	9.0
Viton	0.5	0.2
Butyl	55.1	71.7
Ethylene Propylene	69.7	86.1

As shown by the test results, the AEON 500 and AEON 5000 mineral type oil has fairly good compatibility with the oil resistant elastomers tested.