

## **AEON 2000, AEON 4000, AEON 6000FG-46 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 2000, AEON 4000, and AEON 6000FG-46 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  
Fluorosilicene  
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 2000, AEON 4000, and AEON 6000FG-46.

**Plastics:****Recommended**

Fluorocarbon

Nylon

Delrin

Celcon

Polyethylene

Polycarbonate

Polystyrene

PVC

ABS

The very low volatility characteristics of AEON 2000, AEON 4000, and AEON 6000FG-46 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

	<b>DIESTER OIL</b>	<b>PAO OIL</b>
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 2000 and AEON 4000 hydrotreated paraffinic type oils and the AEON 6000FG-46 Polyalphaolifin (PAO) type oil has fairly good compatibility with the oil resistant elastomers tested.