


<b>ORING.SU</b>				
<b>Material Data Sheet</b>	Code	<b>E80E</b>		Issue 2 Revision 1
	Designation	<b>EPDM (EPT)</b>		November 2001

**MATERIAL TYPE:** General Purpose, Ethylene Propylene Terpolymer (EPT) 75-85 IRHD.

Terpolymer of ethylene, propylene and diene monomers. To meet Aerospace specification DTD 5597A Grade 80. ASTM & ISO designation = EPDM.

**APPLICATION:** : For sealing applications where good fluid resistance and low compression set are of prime importance. For continuous and/or intermittent use in contact with phosphate ester or silicone hydraulic fluids within the temperature ranges as quoted. Suitable for applications in contact with air, this material has excellent resistance to ozone. Unsuitable for use in contact with fuels, mineral oil based and diester oils and silicate fluids or greases derived from these.

**TEMPERATURE RANGE:** Minimum temperature -60°C (-76°F)  
Maximum temperature +160°C (+320°F)

**STORAGE RECOMMENDATION:** Initial storage = 7 years, extended storage = 3 years.

<b>TYPICAL PHYSICAL PROPERTIES:</b>			
<b>Property</b>	<b>Unit</b>	<b>Test Method</b>	<b>Value</b>
Hardness (points)	°IRHD	ASTM D 1415 (=ISO 48)	80
Tensile strength	MPa	ASTM D 412 (=ISO 37)	11.5
Elongation at break	%	ASTM D 412 (=ISO 37)	170
<b>Compression Set, Method B:</b>			
24 hours at 100°C (212°F)	%	ASTM D 395 (=ISO 815)	20
<b>Heat Resistance:</b>			
168 hours at 125°C (257°F)		ASTM D 573 (=ISO 188)	
Hardness change (points)	°IRHD	ASTM D 1415 (=ISO 48)	+10
Tensile strength change (%)			-15
Elongation a break change (%)			-20
<b>Low temperature Resistance:</b>			
at which rigidity modulus shall not exceed 70MPa			-40°C

**HEALTH AND SAFETY DATA:** No known hazard exists if used in accordance with the temperature range as quoted.

**FIRE HAZARD:** Ignition temperature >200°C (392°F).

Thermal decomposition will generate carbon monoxide, hydrocarbons and other complex fumes derived from organic accelerators, antioxidants, plasticisers and process aids. In the event of a fire, fire fighters must wear self-contained breathing apparatus and a protective suit. Extinguish with water, carbon dioxide, foam or dry powder.

**DISPOSAL:** Must conform to national, state and/or local regulations. Landfill is recommended. Burning is not recommended, unless conducted by an approved/licensed incineration agency.

**SPECIAL NOTE:** This information is to the best of our knowledge accurate to the date indicated. However, PPE make no warranty, expressed or implied, that parts manufactured from this material will perform satisfactorily in the customer's application. It is the customer's responsibility to evaluate parts prior to use, especially in applications where their failure may result in injury and/or damage. It should also be noted that all elastomeric parts have a finite life, therefore a regular program of inspection and replacement is strongly recommended.