


ORING.SU				
Material Data Sheet	Code	E50Q	Issue 2 Revision 6	
	Designation	EPDM (EPT)	October 2005	

MATERIAL TYPE: Peroxide cured, Ethylene Propylene Terpolymer, 46-55 °IRHD.

Terpolymer of ethylene, propylene and diene monomers. Complies with FDA code of Federal regulations title CFR21 section 177.2600. Water and n-hexane tested. Also complies to the requirements of USP 25, NF20, 2002, Class 6.

To meet ASTM D2000/SAE J200 line call-out M3CA507, A25, B35, EA14, F17.

APPLICATION: Excellent water and steam resistance with good compression set properties. Heat and chemical resistance is superior to that of sulphur cured EPDM. Not oil resistant.

TEMPERATURE RANGE: Minimum temperature -40°C (-40°F)
Maximum temperature +150°C (302°F)

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

TYPICAL PHYSICAL PROPERTIES:				
Property	Unit	Test Method		Typical Value
Hardness (points)	°IRHD	ASTM D 1415	(=ISO 48)	53
Tensile strength	MPa	ASTM D 412	(=ISO 37)	10
Elongation at break	%	ASTM D 412	(=ISO 37)	400
Compression Set, Method B:				
22 hours at 125°C (257°F)	%	ASTM D 395	(=ISO 815)	30
Heat Resistance:				
70 hours at 125°C (257°F)		ASTM D573	(=ISO 188)	
Hardness change (points)	°IRHD	ASTM D 1415	(=ISO 48)	5
Tensile strength change	%	ASTM D 412	(=ISO 37)	15
Elongation at break change	%	ASTM D 412	(=ISO 37)	-15
Extraction Test Results:				
FDA Regulation	Extraction Test	Authorised Limits mg/sq. inch		Material Extracted (E50Q batch P8824)
Distilled Water	First 7 hours	20		<0.1, 0.5
	2 succeeding hours	1		<0.1, <0.1
n-Hexane	First 7 hours	175		86.4, 90.1
	2 succeeding hours	4		1.3, 2.1
Low Temperature Resistance:				
Non-brittle for 3 mins @	°C	ASTM D2137	(=ISO R812)	-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.

Quotation's and Order's you can send to: sales@oring.su

Official web site: www.oring.su