



MATERIAL TEST DATA SHEET MD109 - 03/02/2011 Page 1 of 2

#### COMPOUND: F225 Ultra Low Temperature AED (VG) POLYMER TYPE: Fluorocarbon Rubber FKM90 (+/-5°)

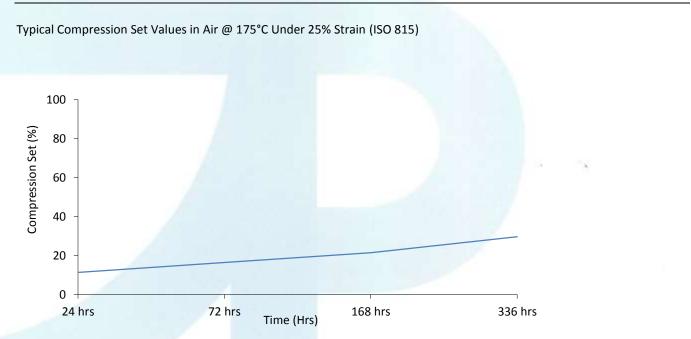
## **Physical Properties**

Property	Test Method	Units	Typical Values
COLOUR			Black
HARDNESS	ISO 48	°IRHD	90
TENSILE STRENGTH	ISO 37	MPa	18.51
MODULUS @ 100%	ISO 37	MPa	13.98
ELONGATION @ BREAK	ISO 37	%	127.97
TEAR STRENGTH	ISO 34	N/mm	18.95
SPECIFIC GRAVITY	ISO 2781	g/cm3	1.84
LOW TEMPERATURE (TR10)	ISO 2921	°C	-39

### **Description**

This special ultra low temperature fluorocarbon rubber compound is designed to give the best rapid gas decompression resistance for seals operating in extreme low temperature – high pressure environments. It has excellent physical properties for a compound with such a high hardness and is suitable for sealing against a wide range of oils, fuels and chlorinated solvent. Service Temperature -54°C (-65°F) to 200°C (390°F).

# **Compression Set**



These properties should not be regarded as specifications, but only as typical properties of the material described. It is intended for use by persons having technical skills and understanding of the seal and gasket design. Since the conditions of use are outside our control, nor have we designed the product shape, we can make no warranties, express or implied and assume no liability in connection with any use of this information. Since development and improvement of compounds is a continuing process, Gapi reserves the right to modify their composition and characteristics. Uncontrolled Copy.





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#### COMPOUND: F225 Ultra Low Temperature AED (VG) POLYMER TYPE: Fluorocarbon Rubber FKM90 (+/-5°)

Property	Test Standard	Units	Typical Values	
After 168 Hours @ 175°C)				
HARDNESS CHANGE	ISO 188	°IRHD	-4	
TENSILE CHANGE	ISO 188	%	-7.74	
ELONGATION CHANGE	ISO 188	%	-12.65	
Property	Test Standard	Units	Typical Values	
After 336 Hours @ 175°C)				
HARDNESS CHANGE	ISO 188	°IRHD	+1	
TENSILE CHANGE	ISO 188	%	-9.84	
ELONGATION CHANGE	ISO 188	%	-22.80	
ABSORPTION TEST				
ABSORPTION TEST	Test Standard	Units	Typical Values	
	Test Standard	Units	Typical Values	
Property	Test Standard ISO 1817	Units	Typical Values	
Property After 168 Hours @ 100°C)		Units %	Typical Values +0.44	
Property After 168 Hours @ 100°C) <b>RM 901 Oil</b>				
Property After 168 Hours @ 100°C) <b>RM 901 Oil</b> VOLUME CHANGE		%	+0.44	
Property After 168 Hours @ 100°C) <b>RM 901 Oil</b> VOLUME CHANGE		%	+0.44	
Property After 168 Hours @ 100°C) <b>RM 901 Oil</b> VOLUME CHANGE HARDNESS CHANGE	ISO 1817	%	+0.44	
Property After 168 Hours @ 100°C) RM 901 Oil VOLUME CHANGE HARDNESS CHANGE RM 903 Oil	ISO 1817	% °IRHD	+0.44 0	
Property After 168 Hours @ 100°C) RM 901 Oil VOLUME CHANGE HARDNESS CHANGE RM 903 Oil VOLUME CHANGE HARDNESS CHANGE	ISO 1817 ISO 1817	% °IRHD %	+0.44 0 -5.49	
Property After 168 Hours @ 100°C) RM 901 Oil VOLUME CHANGE HARDNESS CHANGE RM 903 Oil VOLUME CHANGE HARDNESS CHANGE DISTILLED WATER	ISO 1817	% °IRHD % °IRHD	+0.44 0 -5.49 0	
Property After 168 Hours @ 100°C) RM 901 Oil VOLUME CHANGE HARDNESS CHANGE RM 903 Oil VOLUME CHANGE HARDNESS CHANGE	ISO 1817 ISO 1817	% °IRHD %	+0.44 0 -5.49	

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