# The O-Ring Store LLC We make getting o-rings easy!

## VITON 75 DUROMETER CORD STOCK DATA SHEET FOR COMPOUND V75 CORD

#### **Compound Features:**

- Meets MIL-R-83248C TYPE 2 CLASS 1
- Excellent resistance to petroleum products.
- Excellent fuel resistance.
- Excellent resistance to acids, chemicals, and solvents.
- Excellent resistance to weathering, ozone, and UV/sunlight.
- Works well with silicone grease or oil lubricants.
- Works well with diester lubricants.
- Good abrasion and wear resistance.
- Excellent compression set resistance.
- Excellent permeation resistance.

#### **Compound Limitations:**

- Poor resistance to hot water and steam.
- Poor resistance to automotive and aircraft brake fluids.
- Poor resistance to ketones (MEK).
- Poor resistance to amines.
- Poor resistance to low molecular esters and ethers.

#### **Temperature Range:**

Constant: -10°F to +400°F (-23°C to +204°C)

Intermittent:  $-20^{\circ}$ F to  $+600^{\circ}$ F ( $-28^{\circ}$ C to  $+315.6^{\circ}$ C)

#### **ASTM Callout:**

M6HK 710 A1-10 B38 C12 EF31 F15 Z1 Z1= 75+/-5 SHORE A HARDNESS

#### **Recommended Shelf Life:**

Unlimited

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ORIGINAL PROPERTIES						
Properties	ASTM	Test Method	Unit of	MIL-R-83248C	ASTM D2000	V75 CORD
	Designation		Measure	Specification	Specification	<b>Compound Property</b>
Durometer		D2240	Shore A	75 ± 5	75± 5	78
Tensile Strength	-	D412	PSI	1600	1450	1934
Elongation Resistance		D412	%	125	175	196

HEAT RESISTANCE						
Properties	ASTM	Test Method	Unit of	MIL-R-83248C	ASTM D2000	V75 CORD
	Designation		Measure	Specification	Specification	Compound Property
Durometer Change		46714 0570	Shore A	-5 to +10 Max	+10 Max	+4
Tensile Strength Change	A1 10	ASTM D573	%	-35 Max	-25 Max	-5
Elongation Resistance	A1-10	70 Hours @ 250°C	%	4 F. N.A	25 Maria	. 7
Change		@ 230 C	%	-15 Max	-25 Max	+7

COMPRESSION SET						
Properties	ASTM	Test Method	Unit of	MIL-R-83248C	ASTM D2000	V75 CORD
	Designation		Measure	Specification	Specification	Compound Property
Original Deflection	B38	ASTM D395 B 22 Hours @ 200°C	%	-	15 Max	5.6

COMPRESSION SET						
Properties	ASTM	Test Method	Unit of	MIL-R-83248C	ASTM D2000	V75 CORD
	Designation		Measure	Specification	Specification	Compound Property
Original Deflection	-	ASTM D395 B 336 Hours @ 200°C	%	45 Max	-	32.4

OZONE RESISTANCE						
Properties	ASTM	Test Method	Unit of	MIL-R-83248C	ASTM D2000	V75 CORD
	Designation		Measure	Specification	Specification	Compound Property

FLUID RESISTANCE – REFERENCE FUEL C									
Properties	ASTM	Test Method	Unit of	MIL-R-83248C	ASTM D2000	V75 CORD			
	Designation		Measure	Specification	Specification	Compound Property			
Durometer Change			Shore A	-	± 5	-1			
Tensile Strength Change		ASTM D471	%	-	-25 Max	-8			
Elongation Resistance	EF31	70 Hours	0/		-20 Max	-7.5			
Change		@ 23°C	%	-	-20 IVIAX	-7.5			
Change in Volume			%	-	0 to +10	+4			

Information within is believed to be accurate and reliable. However, The O-Ring Store, LLC makes no warranty, expressed or implied, that parts supplied in this material will perform satisfactorily in specific applications. It's the customer's responsibility to evaluate the material prior to use.

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FLUID RESISTANCE – ARM	FLUID RESISTANCE – ARM-200									
Properties	ASTM	Test Method	Unit of	MIL-R-83248C	ASTM D2000	V75 CORD				
	Designation		Measure	Specification	Specification	Compound Property				
Durometer Change			Shore A	0 to -10	-	-122				
Tensile Strength Change			%	-35 Max	-	-21				
Elongation Resistance		ASTM D471	%	-20 Max	_	+4				
Change	-	70 Hours	/0	-20 IVIAX	-	T4				
Change in Volume		@ 200°C	%	+1 to +25	-	+17.8				
Compression Set			0/	20 May	_	11.3				
Resistance Change			%	20 Max	-	11.5				

FLUID RESISTANCE – REFERENCE FUEL B									
Properties	ASTM	Test Method	Unit of	MIL-R-83248C	ASTM D2000	V75 CORD			
	Designation		Measure	Specification	Specification	Compound Property			
Durometer Change			Shore A	± 5	-	-122			
Tensile Strength Change		ASTM D471	%	-20 Max	-	-21			
Elongation Resistance	-	70 Hours	0/	20 May		+4			
Change		@ 23°C	%	-20 Max	-	+4			
Change in Volume			%	0 to +5	-	+17.8			

LOW TEMPERATURE RESISTANCE									
Properties	ASTM	Test Method	Unit of	MIL-R-83248C	ASTM D2000	V75 CORD			
	Designation		Measure	Specification	Specification	Compound Property			
Brittle Point	F17	D2137 3 Min @ -25°C	Pass/Fail		Non-Brittle	Pass			

LOW TEMPERATURE RESISTANCE								
Properties	ASTM	Test Method	Unit of	MIL-R-83248C	ASTM D2000	V75 CORD		
	Designation		Measure	Specification	Specification	Compound Property		
Temperature Retraction	TR-10	D1329	°F	+5 Max	-	+2		

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