

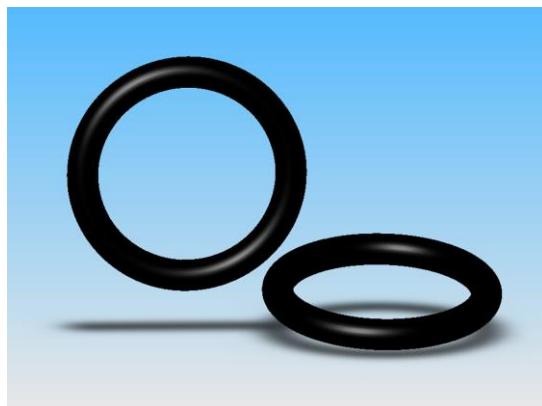


MARKEZ® Z1352 PERFLUOROELASTOMER

TECHNICAL DATASHEET

GENERAL USE BLACK PERFLUOROELASTOMER

This compound offers an almost universal chemical compatibility for use in semiconductor, Oil and Gas and general chemical applications. Its unique cross-linking processing results in an enhanced chemical resistance to strong acids and amine resistance.



FEATURES AND BENEFITS

- Hot amine resistance
- Excellent acid resistance
- Low compression set
- Excellent resistance to a wide range of chemicals
- High sealing efficiency

APPLICATIONS

- Chemical industry
- Valves and pumps
- Pressure vessels
- Couplings and fittings
- Harsh chemical environments
- Compressors (high H₂S concentration environments)

TYPICAL PHYSICAL PROPERTIES

Property	ASTM	Value
Material Type	FFKM	
Color	-----	Black
Durometer, Shore A	D1415	77
Tensile Strength (psi)	D412	2,305
Elongation at break (%)	D412	120
Modulus @ 100% (psi)	D412	2,016
Compression Set: 24 hrs @ 200° C (392° F)	D395	20%
Minimum Operating Temperature *	-----	-15° C (+5° F)
Maximum Operating Temperature *	-----	+260° C (+500° F)
Maximum Operating Pressure (psi) *	-----	1500

* Marco proprietary test method – temperature and pressure limits may vary with seal / hardware design and application conditions

This information is to the best of our knowledge accurate and reliable. However, Marco Rubber makes no warranty, expressed or implied, that parts manufactured from this material will perform satisfactorily in the customer's application. It's the customer's responsibility to evaluate parts prior to use.

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FLUID IMMERSION TEST RESULTS

Ethylenediamine, 72h at 100°C

Hardness Change	Pts	-4
Tensile Strength Change	%	-35
Elongation at Break Change	%	+13
Volume Change	%	+6

Ethanolamine, 72h at 150°C

Hardness Change	Pts	-9
Tensile Strength Change	%	-30
Elongation at Break Change	%	+9
Volume Change	%	+17

NH3 28%, 336h at 100°C

Hardness Change	Pts	-3
Tensile Strength Change	%	-19
Elongation at Break Change	%	-16
Volume Change	%	+4

TMAH 25%, 168h at 90°C

Hardness Change	Pts	-2
Tensile Strength Change	%	-2
Elongation at Break Change	%	-12
Volume Change	%	0

Diglycolamine, 168h at 150°C

Hardness Change	Pts	-10
Tensile Strength Change	%	-35
Elongation at Break Change	%	+11
Volume Change	%	+20

Diglycolamine, 168h at 200°C

Hardness Change	Pts	-22
Tensile Strength Change	%	-62
Elongation at Break Change	%	+3
Volume Change	%	+39

MDEA (N-methyl diethanolamine, 168h at 150°C

Hardness Change	Pts	-2
Tensile Strength Change	%	-22
Elongation at Break Change	%	-2
Volume Change	%	+2

MDEA (N-methyl diethanolamine, 168h at 200°C

Hardness Change	Pts	-5
Tensile Strength Change	%	-38
Elongation at Break Change	%	-6
Volume Change	%	+8

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Dipropylamine, 168h at 150°C

Hardness Change	Pts	-4
Tensile Strength Change	%	-27
Elongation at Break Change	%	-14
Volume Change	%	+6

Dipropylamine, 168h at 200°C

Hardness Change	Pts	-5
Tensile Strength Change	%	-29
Elongation at Break Change	%	-10
Volume Change	%	+7

HN0365%, 72h at 80°C

Hardness Change	Pts	-5
Tensile Strength Change	%	-30
Elongation at Break Change	%	+6
Volume Change	%	+5

Glacial acetic acid, 336h at 100°C

Hardness Change	Pts	-5
Tensile Strength Change	%	-13
Elongation at Break Change	%	-15
Volume Change	%	+5

Formic acid 85%, 168h at 200°C

Hardness Change	Pts	-5
Tensile Strength Change	%	-14
Elongation at Break Change	%	-5
Volume Change	%	+7

Date: 2016-7-1

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