(800) 775-6525
sales@marcorubber.com
www.marcorubber.com

Marco Compound # E1055
70 Durometer, Black, Peroxide Cured EPDM
Technical Datasheet

Common Names:
Ethylene-Propylene (EP, EPDM)

General Description:
EPDM rubber (ethylene propylene diene monomer rubber) is an elastomer which is characterized by wide range of applications and good chemical resistance.

Features:
- Good heat and compression resistance.
- Resistant to ketones, hot and cold water, steam, alkalis, polar solvents, ozone, sunlight, alcohols, glycol engine coolant and Skydrol (phosphate ester hydraulic fluid).

Limitations:
- Not recommended for oils, gasoline, kerosene, aromatic and aliphatic hydrocarbon, halogenated solvents, concentrated acids, non-polar solvents, petroleum oils and aromatic fuels.

Cure System:
- Peroxide

Service Temperature:
-65 to 300° F (-54 to 150° C)

Specification:
ASTM D2000 M3DA710 A25 A26 B35 B36 B44 C32 EA14 F19 Z1 (Z1= Peroxide)

PHYSICAL PROPERTY STANDARDS

ORIGINAL PROPERTIES	ASTM D2000 Requirements	Typical Test Results
Hardness, Shore A	70 +/- 5	73
Color	Black	Black
Tensile Strength, MPa (psi)	10.0 (1,450) min.	16.6 (2404)
Ultimate Elongation, %	200	300
Modulus @ 100% Elongation, psi	-----	620
Tear Strength, kgf/cm	-----	36
Specific Gravity	-----	1.155

HEAT RESISTANCE – A25, (70 hrs. @ 125°C)	ASTM D2000 Requirements	Typical Test Results
Hardness Change, points, max.	-----	0
Tensile Strength Change, %, max.	-----	-8
Ultimate Elongation Change, %, max.	-----	-4
Volume Change, %	-----	-0.0

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.

HEAT RESISTANCE – A25, (70 hrs. @ 150°C)	**ASTM D2000 Requirements**	**Typical Test Results**
Hardness Change, points, max.	+/- 10	1
Tensile Strength Change, %, max.	+/- 20	-7
Ultimate Elongation Change, %, max.	-20	-4
Volume Change, %	-----	-0.8

COMPRESSION SET – B13, ASTM D 395 Method B (22 hrs. @ 125°C)	**ASTM D2000 Requirements**	**Typical Test Results**
Permanent Set, %, max.	-----	11

COMPRESSION SET – B13, ASTM D 395 Method B (22 hrs. @ 150°C)	**ASTM D2000 Requirements**	**Typical Test Results**
Permanent Set, %, max.	25	15

COMPRESSION SET – B13, ASTM D 395 Method B (70 hrs. @ 100°C)	**ASTM D2000 Requirements**	**Typical Test Results**
Permanent Set, %, max.	-----	13

OZONE RESISTANCE– C32, ASTM D 1171 Method B	**ASTM D2000 Requirements**	**Typical Test Results**
No Cracks	Pass	Pass

FLUID RESISTANCE, WATER – EA14, ASTM D 471 (70 hrs. @ 100°C)	**ASTM D2000 Requirements**	**Typical Test Results**
Hardness Change, points, max.	-----	-3
Tensile Strength Change, %, max.	-----	+4
Ultimate Elongation Change, %, max.	-----	+2
Volume Change, %	+/- 5	+1.2

LOW TEMPERATURE RESISTANCE – F19, ASTM D 2137 Method A, 9.3.2		
(Non-brittle after 3 min. @ -55°C)	Non Brittle	Pass

FLUID RESISTANCE, DOT #3 OIL – EA14, ASTM D 471 (70 hrs. @ 125°C)	**ASTM D2000 Requirements**	**Typical Test Results**
Hardness Change, points, max.	-----	-5
Tensile Strength Change, %, max.	-----	-4
Ultimate Elongation Change, %, max.	-----	+2
Volume Change, %	-----	+2.0

FLUID RESISTANCE, DOT #3 OIL – EA14, ASTM D 471 (70 hrs. @ 150°C)	**ASTM D2000 Requirements**	**Typical Test Results**
Hardness Change, points, max.	-----	-5
Tensile Strength Change, %, max.	-----	-6
Ultimate Elongation Change, %, max.	-----	+5
Volume Change, %	-----	+2.7

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.

FLUID RESISTANCE, DOT #4 OIL – EA14, ASTM D 471 (70 hrs. @ 125°C)	**ASTM D2000 Requirements**	**Typical Test Results**
Hardness Change, points, max.	-----	-4
Tensile Strength Change, %, max.	-----	-1
Ultimate Elongation Change, %, max.	-----	+2
Volume Change, %	-----	+3.6

FLUID RESISTANCE, DOT #4 OIL – EA14, ASTM D 471 (70 hrs. @ 150°C)	**ASTM D2000 Requirements**	**Typical Test Results**
Hardness Change, points, max.	-----	-5
Tensile Strength Change, %, max.	-----	+1
Ultimate Elongation Change, %, max.	-----	+6
Volume Change, %	-----	+4.2

Date: 2016-5-9

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.