



Marco Compound # E1016

70 Durometer, Black, Self-Lubricating, Food & Beverage Grade 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. Marco compound E1016 is self-lubricating for ease of installation and also meets a number of Food and Beverage industry specifications.

Features:

- FDA 21 CFR 177.2600 and NSF61 compliant
- Internally lubricated
- Chloramine resistant
- 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)

PHYSICAL PROPERTY STANDARDS

ORIGINAL PROPERTIES	Typical Test Results
Hardness, Shore A	72
Color	Black
Tensile Strength, MPa	16.0
Ultimate Elongation, %	328
Modulus at 100% elongation, MPa	2.4
Specific Gravity	1.10

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 AGING – ASTM D 865 (70 hrs. @ 125°C)	Typical Test Results
Hardness Change, points, max.	+1
Tensile Strength Change, %, max.	+5.3
Ultimate Elongation Change, %, max.	+6.4

COMPRESSION SET – ASTM D 395 Method B	Typical Test Results
Solid: 22 hrs @ 70°C, %	11.8
Solid: 22 hrs @ 100°C, %	9.6
Solid: 22 hrs @ 125°C, %	8.9
Solid: 22 hrs @ 150°C, %	11.4
Solid: 70 hrs @ 100°C, %	15.6
Plied: 22 hrs @ 70°C, %	11.0
Plied: 22 hrs @ 100°C, %	12.1
Plied: 22 hrs @ 125°C, %	13.2
Plied: 22 hrs @ 150°C, %	13.2
Plied: 70 hrs @ 100°C, %	13.2

FLUID RESISTENCE, Water – ASTM D 471 (70 hrs. @ 100°C)	Typical Test Results
Volume Change, %	+1.2
Hardness Change, points	-1

FLUID AGED, Chlorine (50 ppm) – D471, (672 hrs. @ 23°C)	Typical Test Results
Hardness Change, points	-3
Volume Change, %	+4.3
Weight Change, %	+4.1%

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