

# Marco Compound # E1146 70 Durometer, Black, Metal Detectable, FDA 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:

- Metal detectable
- FDA Compliant, 21 CFR 177-2600
- 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 D 2000 M2DA710 A26 B36 EA14 G11 Z1 Z2 Z3

## PHYSICAL PROPERTY STANDARDS

ORIGINAL PROPERTIES	D2000 Specification Requirements	Typical Test Results
Hardness, Shore A	70 +/- 5	74
Color	Black	Black
Tensile Strength, MPa (psi)	10.0 (1,450)	14.7 (2,132)
Ultimate Elongation, %	150	158

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.

<b>HEAT AGING</b> – A26, ASTM D 573 (70 hrs. @ 150°C)	D2000 Specification Requirements	Typical Test Results
Hardness Change, points, max.	10	+2
Tensile Strength Change, %, max.	-20	-1
Ultimate Elongation Change, %, max.	-20	-18

COMPRESSION SET - B36, ASTM D 395 Method B (22 hrs. @ 150°C)	D2000 Specification Requirements	Typical Test Results
Permanent Set, %, max.	25	21

FLUID RESISTENCE, Water – EA14, ASTM D 471 (70 hrs. @ 100°C)	D2000 Specification Requirements	Typical Test Results
Hardness Change, points		-3
Volume Change, %	+/- 5	+4

TEAR RESISTANCE – G11	D2000 Specification Requirements	Typical Test Results
Die B, kN/m, min.	17	18

LOW TEMPERATURE RESISTANCE – Z2, ASTM D 2137	D2000 Specification Requirements	Typical Test Results
(Non-brittle after 3 min. @ -20°C)	Pass	Pass