Request a Quote

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Marco Rubber Compound # E1079
90 Durometer, Black, 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.
- Good chemical 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:
-40 to 300° F (-40 to 150° C)

Specification:
ASTM D2000 M2BA910 A14 B13 F19 Z1 Z2 (Z1 & Z2= High Temperature Steam Test)

PHYSICAL PROPERTY STANDARDS

ORIGINAL PROPERTIES	D2000 Specification Requirements	Typical Test Results
Hardness, Shore A	90 +/- 5	86
Color	--------	Black
Tensile Strength, MPa (psi)	10 (1,440)	15.1 (2,175)
Elongation, %	125	275
Specific Gravity		1.22

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HEAT RESISTANCE – A14, ASTM D 865 (70 hrs. @ 100°C)	D2000 Specification Requirements	Typical Test Results
Hardness Change, points, max.	+/-15	+2
Tensile Strength Change, %, max.	+/-30	+6
Ultimate Elongation Change, %, max.	-50	-13

COMPRESSION SET – B13, ASTM D 395 Method B (22 hrs. @ 70°C)	D2000 Specification Requirements	Typical Test Results
Permanent Set, %, max.	50	13

LOW TEMPERATURE RESISTANCE – F17, ASTM D 2137 Method A, 9.3.2	D2000 Specification Requirements	Typical Test Results
(Non-brittle after 3 min. @ -55°C)		Non-brittle

RESISTANCE IN STEAM AT 550° F FOR 168 Hrs.– Z1, ASTM D1414-94(08)	D2000 Specification Requirements	Typical Test Results
Hardness Change, points, max.	-----	+5
Tensile Strength Change, %, max.	-----	-80.2
Ultimate Elongation Change, %, max.	-----	-10.4

COMPRESSION SET – Z2, ASTM D 395-03(08) Method B (168 hrs. @550° F) ½ Hr. Recovery.	D2000 Specification Requirements	Typical Test Results
Compression Set, %	-----	83.3

Note: Material retains good physical properties and sealing capabilities after the high temperature test. Tests have shown this material can maintain good physical properties when exposed to temperature and steam up to 550° F.