

Marco Rubber Compound # E1141 95 Durometer, Black, L'Garde Cured EPDM for Geothermal Applications Technical Datasheet – Rev 2, August 2019

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. Our E1141 high durometer EPDM compound has been formulated to have excellent resistance to steam and explosive decompression for use in the Geothermal industry. This material can withstand use in steam up to 550°F (288°C).

Features:

- Excellent resistance to steam and hot water
- Excellent explosive decompression resistance
- Good chemical resistance.
- Resistant to ketones, 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:

Y267 (L'Garde)

Service Temperature:

-58 to 550° F (-50 to 288° C)

PHYSICAL PROPERTY STANDARDS

ORIGINAL PROPERTIES	ASTM Standard	Typical Test Results
Hardness, Shore A	D1415	97
Color		Black
Tensile Strength, MPa (psi)	D412	16.7 (2,422)
Elongation, %	D412	117
Specific Gravity	D792	1.12
Modulus @ 100%, MPa		14.4

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.

DISTILLED WATER AGING - (24hrs. @ 300°C)	Typical Test Results
Hardness, %	-3
Volume Change, %	+5.8
Weight Change, %	+5.9

STEAM RESISTANCE - (24hrs. @ 300°C)	Typical Test Results
Hardness, %	-3
Tensile Strength, %	-58.7
Ultimate Elongation, %	-62.4
Volume Change, %	+1.6
Weight Change %	-0.1

STEAM RESISTANCE - (168hrs. @ 300°C)	Typical Test Results
Hardness, %	-12
Volume Change, %	+6.5
Weight Change %	+5.2

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