



Rhondama Material Data Sheets for Manufactured Parts

EPDM

Ethylene Propylene Diene Monomer – Peroxide Cured - Black

EP is a black Ethylene Propylene Rubber, commonly referred to as EPDM. This material is often used in hot water or steam applications as well as in fire resistant fluids where NO mineral oils are used. EPDM material is also used in bases, acids and alcohols. The use of EPDM in brake fluids is only recommended according to regional regulations. EPDM is NOT resistant to mineral, vegetable or animal oils.

Resistant against

Water up to 90°C, HFC Fluids, Ozone and Air up to 100°C

Applicable for

Seals, Wipers, O-Rings, Flange Seals and Gaskets

Mechanical, Physical & Thermal Properties

properties	condition	standard	unit	value	unit	value
hardness	23°C	ISO 868	shore A	85 ± 5	shore A	85 ± 5
modulus 100%	23°C	DIN 53 504	MPa		psi	
tensile strength	23°C	DIN 53 504	MPa	≥ 12	psi	≥ 1740
elongation at break	23°C	DIN 53 504	%	≥ 80	%	≥ 80
tear strength	23°C	DIN ISO 34-1	kN/m	≥ 10	lbf/inch	≥ 55
spec. gravity	23°C	ISO 1183	kg/m ³	1220	g/cm ³	1,22
rebound elasticity	23°C	DIN 53 512	%	37	%	37
abrasion	23°C	DIN 53 516	mm ³	140	mm ³	140
compression set	*	ISO 815	%	≤ 7	%	≤ 7
compression set	**	ISO 815	%	≤ 7	%	≤ 7
compression set	***	ISO 815	%		%	
minimum service temperature			°C	-45	°F	-49
maximum service temperature			°C	130	°F	266
temp. max water/steam			°C	130	°F	266
temp. max hot air, short			°C	180	°F	356

* 24h 70°C 25% def. ** 24h 100°C 25% def. *** 24h 150°C 25% def.

