

DSM 3.2.3

EPDM_Ethylene Propylene Rubber

General:

A synthetic black elastomer engineered primarily to have a high degree of resistance to UV radiation and ozone attack, namely weathering. This property has made EPDM an attractive choice for roofing applications & the automotive industry for window & door seals including under bonnet hoses.

Application:

- Seals.
- Gaskets.

Profiles:

- Sheet

Specifications:

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	40.0 - 90.0	40.0 - 90.0	Depends on compounding
Tensile Strength, Ultimate	17.0 MPa	2470 psi	
Elongation at Break	600 %	600 %	Reinforced

Thermal Properties	Metric	English	Comments
CTE, linear	576 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$ @Temperature 20.0 $^\circ\text{C}$	320 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$ @Temperature 68.0 $^\circ\text{F}$	
Maximum Service Temperature, Air	150 $^\circ\text{C}$	302 $^\circ\text{F}$	
Minimum Service Temperature, Air	-54.0 $^\circ\text{C}$	-65.2 $^\circ\text{F}$	t_g
Glass Temperature	-54.0 $^\circ\text{C}$	-65.2 $^\circ\text{F}$	

Benefits:

Compatible with hydraulic fluids, ketones, hot & cold water and alkalis.

Limitations:

Incompatible with most oils, petrol, aromatic & aliphatic hydrocarbons, halogenated solvents & concentrated acids.

Note:

Material hardness to be specified on DEK drawing.

These values are representative. For critical applications, refer to data-sheet.

MECHANICAL PROPERTIES					
	HARDNESS Shore A	TENSILE STRENGTH:	YOUNGS MODULUS:	POISSONS RATIO:	DENSITY:
EPDM	---	17 MPa	6 GPa	0.5	1430 Kg/m³

Alternatives:

Alternatives are allowed only with the express written permission of ASMPT. Please email details of your request to engineering_enquiries@asmpt.com

Issue	01	02	03	04	05	06	07	08	09
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