



THE GUND COMPANY

Manufacturers & fabricators of engineered material solutions

Item: Elastomeric Materials Comparison

Description: An elastomeric material is any material exhibiting elastic or rubber-like properties. Generally speaking, elastomeric materials are measured in material type, compound, and durometer (the hardness of the material). Since there are such a wide variety of elastomeric materials, the application is critical to understanding the best material compound for the job.

The following are key data points for comparing Nitrile, Fluorocarbon (Viton®), Silicone, EPDM, and Chloroprene (Neoprene®). Contact us to learn more about the technical description and features of these materials.

The Gund Company		Nitrile	Fluorocarbon (Viton®)	Silicone	EPDM	Chloroprene (Neoprene®)
Standard Color(s)		Black	Black / Brown	Rust	Black	Black
ASTM D2000 Classes		BF, BG, BK, CH	HK	FC, FE, GE	AA, BA, CA, DA	BC, BE
ASTM D1418 Designation		NBR	FKM	MQ, PMQ, VMQ, PVMQ	EPDM	CR
Temperature Range ¹	° C	-40° to +121° C	-28° to +240° C	-70° to +240° C	-51° to +148° C	-42 to +121 ° C
	° F	-40° to +250° F	-20° to +400° F	-94° to +400° F	-60° to +300° F	-45 to +250 ° F
Hardness Range (Shore "A")		40 to 90	50 to 95	25 to 80	40 to 90	40 to 90
Specific Gravity (Range)		1.27 to 1.38	1.74 to 2.17	1.11 to 1.52	1.10 to 1.29	1.31 to 1.60
Key Uses		Oil Resistant Low Temp Apps Off-Road Automotive Marine FDA Compatible	Aerospace Seals Automotive Fuel Seals High Temp / Low Compression Chemical Exposure Vacuum Service	Static Seals Extreme Temperature Applications Medical Seals FDA Compatible	Outdoor Applications Automotive Brake & HVAC Systems Drive Belts UV Resistance	Transportation Weather Exposure Refrigerator Seals FDA Compliant Food & Beverage
Common Trade Names		Chemigum, Hycar, Krynac, Nysyn, Paracril, & Perbunan	Viton®, Fluorel, Technoflow	Baysoline Silastic Silplus	Nordel®, Epcar, Vistalon, Epsyn, Royalene	Neoprene® Baypen

¹ - Temperature range can be application specific. Custom formulations within each chemical family can achieve different temperature ranges.

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