

Metro Industries Material Specification

Matl Style Code

RSBN-E50

Material Description	Nitrile (Buna-n) sheet rubber, commercial grade, medium hardness (50 Durometer, Shore A).
General Features	Nitrile rubber is a copolymer of acrylonitrile (ACN) and butadiene that is generally resistant to oil, fuel, aliphatic hydrocarbons, and other chemicals, but can be attacked by ozone, aromatic hydrocarbons, ketones, esters and aldehydes. Buna-n rubber provides good strength, resilience, and operating temperature ranges.
Aliases	Nitrile Rubber, Buna-n, Buna, NBR, Perbunan, Nitrile Butadiene
Common Variations	Standard rolls and slabs (thicker grades) in fractional increments from 1/64" thick and up, widths of 36" and 48", smooth and cloth textured surface finishes, and black color, with a wide range of custom variations also available.
Common Applications	Rubber gaskets, o-rings, rubber washers, and other rubber seals in application environments including oils and fuels.

Physical Properties*

	Value	Tol	Unit	Method/Remarks
Hardness	50	+/- 5	Shore A	Durometer
Service Temperature	-25 min +200 max	Ref Only	Degrees F	Extended exposure to extreme limits not recommended.
Tensile Strength	1000	Min	PSI	ASTM
Ultimate Elongation	350	Min	%	ASTM

* Physical Properties are based on manufacturers' published "Typical Properties" and are offered here for reference only unless otherwise specified.

Dimensional Tolerances

Unless otherwise specified, dimensional tolerances for uncut raw materials and fabricated products are defined in Configuration Specification [STD-R01](#).

Revisions

Rev#	Date	Description	Approved	Date
00	5/1/2012	Original Release	Dan Garrett	5/19/2012