

***NBR / Nitrile or Buna N
Acrylonitrile Butadiene***

◆ **Physical & Mechanical Properties**

▪ Durometer or Hardness Range	20 – 95 Shore A
▪ Tensile Strength Range	200 – 3,500 PSI
▪ Elongation (Range %)	350 % – 650 %
▪ Abrasion Resistance	Good to Excellent
▪ Adhesion to Metal	Excellent
▪ Adhesion to Rigid Materials	Good to Excellent
▪ Compression Set	Good to Excellent
▪ Flex Cracking Resistance	Fair to Good
▪ Impact Resistance	Fair to Good
▪ Resilience / Rebound	Good
▪ Tear Resistance	Good to Excellent
▪ Vibration Dampening	Fair to Good

◆ **Chemical Resistance**

▪ Acids, Dilute	Good
▪ Acids, Concentrated	Poor to Fair
▪ Acids, Organic (Dilute)	Good
▪ Acids, Organic (Concentrated)	Poor
▪ Acids, Inorganic	Fair to Good

NBR / Nitrile or Buna N Acrylonitrile Butadiene

◆ **Chemical Resistance**

▪ Alcohol's	Fair to Good
▪ Aldehydes	Poor to Fair
▪ Alkalies, Dilute	Good
▪ Alkalies, Concentrated	Poor to Good
▪ Amines	Poor
▪ Animal & Vegetable Oils	Good to Excellent
▪ Brake Fluids, Non-Petroleum Based	Poor
▪ Diester Oils	Fair to Good
▪ Esters, Alkyl Phosphate	Poor
▪ Esters, Aryl Phosphate	Poor to Fair
▪ Ethers	Poor
▪ Fuel, Aliphatic Hydrocarbon	Good to Excellent
▪ Fuel, Aromatic Hydrocarbon	Fair to Good
▪ Fuel, Extended (Oxygenated)	Fair to Good
▪ Halogenated Solvents	Poor
▪ Hydrocarbon, Halogenated	Poor to Fair
▪ Ketones	Poor
▪ Lacquer Solvents	Fair
▪ LP Gases & Fuel Oils	Excellent
▪ Mineral Oils	Excellent
▪ Oil Resistance	Good to Excellent
▪ Petroleum Aromatic	Good
▪ Petroleum Non-Aromatic	Excellent
▪ Refrigerant Ammonia	Good
▪ Silicone Oil	Good
▪ Solvent Resistance	Good to Excellent

NBR / Nitrile or Buna N Acrylonitrile Butadiene

◆ **Thermal Properties**

- | | |
|---------------------------------------|----------------------|
| ▪ Low Temperature Range | - 70° F to 0° F |
| ▪ Minimum for Continuous Use (Static) | - 40° F |
| ▪ Brittle Point | - 70° F to 0° F |
| ▪ High Temperature Range | + 210° F to + 250° F |
| ▪ Maximum for Continuous Use (Static) | + 250° F |

◆ **Environmental Performance**

- | | |
|------------------------|-------------------|
| ▪ Colorability | Excellent |
| ▪ Flame Resistance | Poor |
| ▪ Gas Permeability | Fair to Excellent |
| ▪ Odor | Good |
| ▪ Ozone Resistance | Fair to Good |
| ▪ Oxidation Resistance | Good |
| ▪ Radiation Resistance | Fair to Good |
| ▪ Steam Resistance | Fair to Good |
| ▪ Sunlight Resistance | Poor to Good |
| ▪ Taste Retention | Fair to Good |
| ▪ Weather Resistance | Fair to Good |
| ▪ Water Resistance | Good to Excellent |

For assistance in identifying the appropriate polymer or material, or to develop and formulate a NBR or nitrile / buna n rubber compound to meet your specific application and performance requirements, please contact Alva Rubber Products at e-mail: ventas@alvarubber.com.mx or phone:(55) 21 59 72 73

Alva Rubber Products Company, Inc. makes no expressed or implied warranty as to any qualities, attributes, or characteristics of any polymer or material. This information is provided for reference only.