

## Gasket Selection Guide

### Gasket Identification

Gasket Series	1016	1030	1011 1074	1016	1003 1011 1038
Chemical Nomenclature	Natural Rubber	Styrol Butadien Rubber	Nitrile Rubber	Chloroprene Rubber	Ethylene Propylene Dien Rubber
Abbreviations per ASTM D 1418	NR	SBR	NBR	CR	EPDM
Other Names		Styrene Butadiene, Buna S	Buna N, Hycar, Perbunan	Neoprene	Nordel, Royalene, Buna AP

### Gasket Applications

Physical Characteristics	Excellent resilience and abrasion/tear resistance	Good all around - used in tires	Good all around, moderate abrasion resistance	Excellent flexibility & toughness	Excellent "set" resistance. Good abrasion resistance
Chemical Resistance	Poor for sunlight, ozone, oils. Good for alcohols	Good for normal environment	Good for oil and normal environment	Good for oil, Freon, weathering	Excellent for UV, Ozone, water, seawater, polar solvents, steam

### Gasket Specifications

Temperature Range	-50 to 105 C -60 to 220 F	-45 to 100C -50 to 210 F	-40 to 120 C -40 to 250 F	-40 to 120C -40 to 250 C	-60 to 150 C -70 to 300 F
Shore A Hardness Range	40-90	45-90	45-90	40-90	40-90
Tensile Strength	4-15	4-15	4-14	5-15	6-13
Recoil Elasticity @ 20 deg C	Excellent	Good	Satisfactory	Good	Good

#### Resistance Properties

Abrasion Resistance	Very Good	Very Good	Good	Good	Good
Chemical Resistance	Good	Good	Satisfactory	Good	Very Good
Oil Resistance	Low	Low	Excellent	Good	Low
Gasoline Resistance	None	Low	Good	Low	Low
Solvent Resistance	Low	Low	Good	Good	Satisfactory
Ozone Resistance	Satisfactory	Satisfactory	Satisfactory	Very Good	Excellent
General Climate Resistance	Good	Good	Good	Very Good	Excellent
Gas Impermeability	Satisfactory	Satisfactory	Good	Good	Satisfactory
Permanent Deform Resistance	Very Good	Good	Good	Good	Good
Adhesion to Metal	Excellent	Very Good	Satisfactory	Good	Satisfactory
Adhesion to Textile	Excellent	Good	Satisfactory	Excellent	Satisfactory
Dielectric Properties	Very Good	Good	Very Good	Satisfactory	Very Good

### Important Notes

- 1) No gasket manufacturer can do more than suggest the material that a customer should test.
- 2) If no oil is present - pick EPDM, if oil is present - pick Nitrile Rubber
- 3) Sealing bubble gasket requires about 10# per foot of gasket length to compress 2 mm.
- 4) Typical foam gasket requires about 4 times the force to seal.
- 5) Radiused corners are suggested for gasket profiles - see catalog pages for minimum radii per profile/
- 6) To ensure there is no leak where the ends meet, they can be joined using "Black Max" from Loctite.