



General properties of common polymers used in sheet rubber

| | Neoprene | Nitrile | EPDM | SBR | CI | Pure Gum | Silicone | Viton | CSM |
|-----------------------------|-----------|-----------|-----------|-----------|-----------|-------------|-----------|-----------|-----------|
| Heat Aging | Good | Good | Excellent | Good | Good | Good | Excellent | Excellent | Good |
| Abrasion Resistance | Very Good | Very Good | Good | Good | Good | Excellent | Poor | Fair | Fair |
| Compression Set | Fair | Fair | Fair | Good | Good | Good | Fair | Good | Good |
| Resilience | Excellent | Good | Good | Good | Good | Outstanding | Fair | Fair | Fair |
| Tear | Good | Good | Good | Fair | Good | Good | Good | Fair | Fair |
| Flame Resistance | Excellent | Poor | Very Poor | Very Poor | Very Poor | Very Poor | Fair | Good | Good |
| Weathering | Very Good | Fair | Excellent | Fair | Fair | Fair | Good | Excellent | Excellent |
| Ozone Resistance | Very Good | Very Poor | Good | Fair | Fair | Poor | Good | Excellent | Excellent |
| Gas Permeability Resistance | Good | Good | Good | Good | Good | Good | Poor | Poor | Poor |
| Oil Resistance | Good | Excellent | Very Poor | Poor | Poor | Very Poor | Fair | Good | Fair |
| Gas Resistance | Good | Excellent | Very Poor | Poor | Poor | Very Poor | Poor | Poor | Poor |
| Acid Resistance | Good | Good | Good | Fair | Fair | Good | Poor | Good | Good |
| Alkali Resistance | Good | Good | Good | Fair | Fair | Good | Poor | Good | Good |

TAKE NOTE!

The general properties shown in the chart above are not intended to be used to make final choices for a specific application. Exposure to heat, sunlight, chemicals, ozone and oils, as well as pressure, tension, binding, stretching and folding, will affect the performance of a rubber product.

Suitability must be determined by a qualified person. See Cautionary Statement on the next page.

Sheet Rubber Tolerances

(Tolerances conform to RMA standards, Durometer \pm 5 points.)

| Thickness | Tolerance | Thickness | Tolerance |
|-------------------------------------|-------------|------------------------------------|------------------|
| 1/32" but not including 1/16" | \pm .012" | 9/16" but not including 3/4" | \pm .062" |
| 1/16" but not including 1/8" | \pm .016" | 3/4" but not including 1" | \pm .094" |
| 1/8" but not including 3/16" | \pm .020" | 1" and Over..... | \pm 10% |
| 3/16" but not including 3/8" | \pm .031" | Width | Tolerance |
| 3/8" but not including 9/16" | \pm .047" | 36" and over | \pm 1.00" |



Recommended Shelf Life for Sheet Rubber

| Common Polymer Name | Recommended Shelf Life |
|---------------------------|------------------------|
| Viton / Silicone | 20 Years |
| Nitrile / Neoprene | 5-10 Years |
| EPDM / CSM | 5-10 Years |
| Natural Rubber (Pure Gum) | 3-5 Years |
| SBR | 3-5 Years |

Shelf life may be affected if storage factors listed below are different than the guidelines shown by the Rubber Manufacturers Association.

Storage of Rubber Products[†]

Rubber products in storage can be adversely affected by such factors as temperature, ozone, sunlight, oils, solvents, corrosive liquids and fumes, insects and rodents, and radiation.

The warehousing area should be relatively cool, dark and free from dampness and mildew. All items should be stored on a first-in first-out basis, since even under these conditions an unusually long period of storage could deteriorate certain rubber products.

The ideal storage temperature for rubber products is 50° to 70° F (10° to 21° C), with a maximum limit of 100° F (38° C). If stored below 32° F (0° C), some products may become stiff and should be warmed before being placed in service. Rubber products should not be stored near sources of heat, such as radiators and baseboard heaters.

Rubber products should not be stored under conditions of high or low humidity.

To protect against the adverse effects of ozone, rubber products should not be stored near electrical equipment that may generate ozone and should not be stored for any lengthy period of time in geographical areas known to be high in ozone. Conditions of direct or reflected sunlight should also be avoided.

Whenever feasible, rubber products should be stored in their original shipping containers, especially when such containers are wooden crates or cardboard cartons, since this will provide protection against the deteriorating effects of oils, solvents and corrosive liquids, as well as affording some protection against ozone and sunlight.

Because certain rodents and insects thrive on rubber products, adequate protection from them should be provided.

† Based on information from Rubber Manufacturers Association Sheet Rubber Handbook, second edition.