

ROLLER AND BUMPER MATERIAL INFORMATION

Base Elastomer	Chemical Name	Advantages	Disadvantages	Max. Service Temp F°	Min. Service Temp F°
Neoprene Black	Chloroprene	Flame and weather resistant. Resists: gasoline, oil, ozone, high temp.	Affected by phosphate hydraulic fluids, aromatic hydrocarbons.	Continuous 200° Intermittent 250°	-40°
Urethane	Di-Isocyanate Polyurethane	Highest abrasion resistance, strength & load bearing. High elongation, hardness. Resistant to ozone & oxygen.	Affected by ether, esters, acid, aromatics, alkalis.	Continuous 200° Intermittent 250°	-65°
White Nitrile	Nitrile Butadiene	Resistant to gasoline, oil alcohol, abrasion.	Affected by degreaser solvents.	Continuous 175° Intermittent 225°	-60°

All durometer ratings are based on a Shore A rating.

Durometer Guide:

Durometer 20 = Stiff Foam Rubber
 Durometer 35 = Pencil Eraser
 Durometer 60 = Auto Tire
 Durometer 80 = Skateboard Wheel
 Durometer 95 = Hockey Puck

Urethane Color Guide:

Durometer 35 = Yellow
 Durometer 60 = Blue
 Durometer 80 = Red
 Durometer 95 = Orange

All Nitrile Rollers and Bumpers are white. All Neoprene Rollers and Bumpers are black.

Roller and Bumper Material Property Comparison Chart:

4 = Excellent 3 = Good 2 = Fair 1 = Poor

Property:	White Nitrile	Neoprene	Urethane
Tensile Strength	2	3.5	4
Ozone Resistance	1	2.5	4
Cut Resistance	2	3	4
Abrasion Resistance	2.5	3.5	4
Tear Strength	2	3	4

Resistance To:	White Nitrile	Neoprene	Urethane
Compression Set	2.5	3	3.5
ASTM #1 Oil	4	2.5	4
ASTM #2 Oil	4	2	4
Reference Fuel B	3.5	2	4
Ketones: MEK	1	2	1
Aromatics: Toluene	3.5	1.5	4
Aliphatics: Hexane	4	3	4
Ethyl Acetate	1.5	3	1.5
Cellosolve	2	4	1.5
Methylene Chloride	1	1	1
Trichloroethylene	1	1	1
Diethylene Glycol	4	4	3
Isopropyl Alcohol	3.5	3.5	3
Caustics: 10% NaOH	3.5	3.5	1
Acids: H2SO4	2	3	1