

O-Ring Information

DEFINITIONS

AS568 Dash Number—A universal standard that defines the sizes and tolerances for O-rings.

Durometer/Hardness—Elastomer material hardness is referred to as "durometer" within a material, the higher durometer number, the harder the material.

Material Comparison Chart

	Buna N	EPDM	Neoprene	Polyurethane	PTFE	Silicone	Viton®	Viton® ETP
Physical Properties								
Durometer	70 Shore A/ 90 Shore A	70 Shore A	70 Shore A	70 Shore A	55 Shore D	70 Shore A	75 Shore A/ 90 Shore A	75 Shore A
Hardness	Medium Hard/Hard	Medium Hard	Medium Hard	Medium Hard	Very Hard	Medium Hard	Hard/Hard	Hard
Temperature Range	-40° to 250°F	-65° to 300°F	-40° to 275°F	-40° to 180°F	-100° to 500°F	-65° to 450°F	-15° to 400°F	-10° to 400°F
Tensile Strength	Good	Good	Good	Good	Excellent	Poor	Good	Good
Compression Set	Good	Good	Fair	Fair	Poor	Good	Excellent	Poor
Resilience	Good	Good	Good	Good	Poor	Fair	Good	Good
Tear Strength	Good	Good	Good	Excellent	Fair	Poor	Fair	Fair
Gas Impermeability	Good	Good	Good	Good	Good	Poor	Good	Good
Environmental Resistance Abrasion								
Abrasion	Good	Good	Good	Excellent	Good	Poor	Good	Good
Cold	Good	Excellent	Good	Good	Excellent	Excellent	Poor	Excellent
Flame	Poor	Poor	Excellent	Poor	Excellent	Fair	Excellent	Excellent
Heat	Good	Good	Good	Fair	Excellent	Excellent	Excellent	Excellent
Ozone	Good	Excellent	Good	Excellent	Excellent	Excellent	Excellent	Excellent
Radiation	Poor	Good	Fair	Poor	Excellent	Excellent	Poor	Poor
Weather	Fair	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Chemical Resistance								
Acetone	Poor	Excellent	Poor	Poor	Excellent	Poor	Poor	Fair
Anhydrous Ammonia	Good	Excellent	Excellent	Poor	Excellent	Fair	Poor	Fair
Animal Fats	Excellent	Good	Good	Fair	Excellent	Fair	Excellent	Excellent
Bleach	Poor	Excellent	Fair	Poor	Excellent	Good	Excellent	Excellent
Carbon Dioxide	Excellent	Good	Good	Excellent	Excellent	Good	Excellent	Excellent
Detergents	Excellent	Excellent	Good	Poor	Excellent	Excellent	Excellent	Excellent
Diesel Oil	Excellent	Poor	Fair	Fair	Excellent	Poor	Excellent	Excellent
Ethanol	Fair	Excellent	Excellent	Poor	Excellent	Good	Poor	Excellent
Fatty Acids	Good	Fair	Good	Fair	Excellent	Fair	Excellent	Excellent
Gasoline	Good	Poor	Poor	Good	Excellent	Poor	Excellent	Excellent
Hydraulic Oils (Petroleum)	Excellent	Poor	Good	Excellent	Excellent	Good	Excellent	Excellent
Hydrochloric Acid (37%)	Poor	Fair	Poor	Poor	Excellent	Fair	Excellent	Excellent
Kerosene	Excellent	Poor	Good	Excellent	Excellent	Poor	Excellent	Excellent
Liquid Propane Gas	Excellent	Poor	Good	Excellent	Excellent	Fair	Excellent	Excellent
Lubricating Oils (Petroleum)	Excellent	Poor	Good	Good	Excellent	Poor	Excellent	Excellent
Methanol	Poor	Excellent	Excellent	Poor	Excellent	Excellent	Poor	Excellent
Mineral Oil	Excellent	Fair	Good	Excellent	Excellent	Good	Excellent	Excellent
Natural Gas	Excellent	Poor	Excellent	Good	Excellent	Poor	Excellent	Excellent
Nitrogen	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Silicone Grease	Excellent	Excellent	Excellent	Excellent	Excellent	Fair	Excellent	Excellent
Steam	Poor	Excellent	Poor	Poor	Excellent	Fair	Poor	Good
Sulfuric Acid (Dilute)	Good	Excellent	Good	Poor	Excellent	Excellent	Excellent	Excellent
Toluene	Poor	Poor	Poor	Poor	Excellent	Poor	Excellent	Excellent
Vegetable Oils	Excellent	Fair	Fair	Fair	Excellent	Good	Excellent	Excellent
Water	Excellent	Excellent	Good	Poor	Excellent	Excellent	Good	Excellent

O-Ring Splicing Kits

Provide an assortment of O-ring cord stock for quick repair and replacement.

LOCTITE

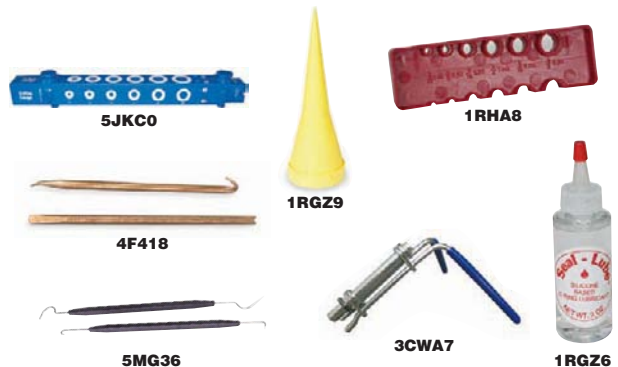
Buna N	Description	Includes	Brand	Item No.
4-Pc. Splicing Kit		1 fl oz Cleanup Solvent, 1 fl oz Waterproofing Solution, 1/8 oz Loctite(R) 404(R) Quick Set(R) Instant Adhesive, Cord Stock, Cutting Blade, Plastic Box with Lid Card, Splicing Jig	Loctite	5A234
5-Pc. Splicing Kit, 70 Shore A		Adhesive, Cord Stock, Cutting Tool, Plastic Box with Lid Card, Splicing Jig	—	1RHA2
9-Pc. Metric Splicing Kit, 70 Shore A		Adhesive, Cord stock, Cutting Tool, Plastic Box with Lid Card, Splicing Jig	—	1RHA6
14-Pc. Inch/Metric Splicing Kit, 70 Shore A		Cord Stock, Cutting Tool, Plastic Box with Lid Card, Splicing Jig	—	1RHA7
Viton				
5-Pc. Standard Splicing Kit, 75 Shore A		Adhesive, Cord Stock, Cutting Tool, Plastic Box with Lid Card, Splicing Jig	—	1RHA3
Silicone				
5-Pc. Splicing Kit, 70 Shore A		Adhesive, Cord Stock, Cutting Tool, Plastic Box with Lid Card, Splicing Jig	—	1RHA4
EPDM				
5-Pc. Splicing Kit, 70 Shore A		Adhesive, Cord Stock, Cutting Tool, Plastic Box with Lid Card, Splicing Jig	—	1RHA5



O-Ring Tools and Accessories

OTC

Description	Application	Brand	Item No.
Measuring			
O-Ring Sizing Gauge	Measuring Device Used to Identify O-Ring Size	—	5JKC0
O-Ring Measuring Cone	Sizes 3/16 to 5/8" I.D. Fits Standard Widths 0.070, 0.103, 0.139, 0.210, and 0.275"	—	1RGZ9
Installation			
O-Ring Splicing Jig	For O-Ring Cords 0.059" to 0.375", (1.5mm to 9.5mm)	—	1RHA8
O-Ring Tool, Solid Brass	To Minimize O-ring and Hydraulic Failures due to Improper Installation or Removal	—	4F418
O Ring/Oil Seal Pick Set	For The Installation Of 1" ID Seals Applied To Shaft Sizes 1 To 1 1/2"	OTC	5MG36
Rod Seal O-Ring Installation Tool, Plated Steel With Vinyl Handles	For The Installation Of 1 1/2" ID Seals Applied to Shaft Sizes 1 1/2 To 2"	—	3CWA7
	For The Installation Of 2" ID Seals Applied To Shaft Sizes 2" And Over	—	3CWA9
Lubrication			
O-Ring Lubricant	For Ease of Installation of O-Rings	—	1RGZ6



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