ACHIEVO ENGINEERING COMPONENTS PVT. LTD.

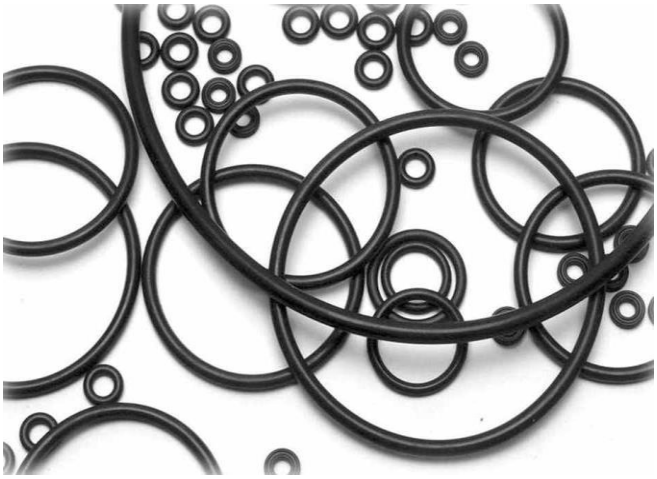
"TRUSTED PARTNERS FOR QUALITY PRODUCTS"

ACHIEVO ENGINEERING COMPONENTS PVT.LTD

Manufacturer & Exporter of Oil Seals, O Rings & Sealing Rubber Products









The main responsibility of every manufacturer is to develop good quality products that can work reliably and give cost-effective results. Understanding this responsibility, we, **Achievo Engineering Components Pvt. Ltd.,** a **Manufacturer** and **Exporter** of **Oil Seals, O rings, Gaskets, Garter Springs for Oil seal** along with a host of various other Sealing products, ensure that what we develop is of exceedingly good quality and value for money. We are a Mumbai (India) based company that believes the only way to gain a sure foot in the market is by understanding the demands of the customers and developing a range of products similar to their requirements. We are in continuous long term association with customers and also develop custom-made products as per the specifications given by them.

Our company established in the year **2001** and since then it has been walking towards the path of success and setting milestones. We have been successful in becoming the most appreciated one stop shop that provides companies which are engaged in Automobiles, Machinery, Shipping, Textile, and other Industries.

EXPORT MARKET

No geographical boundaries should hinder customers from getting what they desire. Working to improve the same, we make it easy for international buyers to buy a wide variety and diverse products under one roof. To retain our international customers we assure them timely shipment and delivery of only high quality products that will surpass their expectation with quality working. We supply globally, whether small quantity or volume business. Feel free to contact us for any requirement.

QUALITY ASSURANCE

There is no denying in the fact that whatever we do, we get it back. Believing in the same, we design and develop only best-in-quality products that can prove great value for customer's money and bring to us their repeat orders. We make sure all the raw materials like Natural and Synthetic Rubber, Brass, Stainless Steel, Mild Steel, and Copper, are sourced from certified vendors who have a good reputation in the market. After production of each and every product, be it a rubber product or a metal product, our quality checking specialists ensure that every product is developed to utmost perfection. To conduct a variety of test, they make use of modern machines and user-friendly equipment and test all produced range in our special quality testing lab.

COMPANY PROFILE

OBJECTIVE

Achievo Engineering Components Pvt Ltd is a leading manufacturer of Oil Seals, O ring & Customised Sealing products. Our objective is to constantly develop high quality products at a competitive price with complete customer satisfaction.

VISION

Our vision is to be known as experts in sealing products. We want to be a premier brand known for quality oil seals and O-rings in global market.

ACHIEVEMENTS

Quality Management System (QMS) has been successfully assessed & found to be in accordance with the requirements of the standard under ISO 9001:2008

COMPANY DETAILS

Nature of Business	Exporter, Manufacturer & Supplier
Year of Establishment	2007
Working As An Original Equipment Manufacturer	Yes
No. of Production Units	03
Production Type	Semi-Automatic
Warehousing Facility	Yes
No. of Employees	65
Monthly Production Capacity	Scalable as per business requirements
Importers/ Exporters Code	0313084963
Export Percentage	20%
GST No.	27AAGCA3707M1ZJ
Some Major Clients [Clientele]	Indian Railways, Ashok Leyland, Tata Motor, BARC, Adani Port Trust
Standard Certifications	ISO 9001:2008, ISO TS 16949
Annual Turnover	USD 1 Million
Credit Rated	Yes (ONICRA)

Bankers	HDFC Bank & Indian Overseas Bank

OUR PRODUCTS

OIL SEALS

1) SC TYPE / SPRING LOADED SINGLE LIP MI TYPE OIL SEAL (METAL INSIDE)





Spring Loaded Single Lip Oil Seal assembled on rotary shaft made from elastomers with reinforced metal, mainly used for oil or grease retention.

This type of oil seal uses a garter spring to maintain a constant radial load on the shaft to become more efficient. The Rubber covered at outer diameter press fits to create a positive seal with the housing bore.

STANDARD SEAL MATERIALS

NBR: Temp -20F / +250F
FKM: Temp -40F / +400F

APPLICATIONS

For general purpose oil & grease retention in applications such as Electric motors, Gearboxes, Pumps, Fans, Rolling Mills, etc

2) TC TYPE OIL SEAL / SPRING LOADED DOUBLE LIP OIL SEAL (MIDL METAL INSIDE DOUBLE LIP oil seal)





Spring Loaded Double Lip Oil Seal assembled on rotary shaft made from elastomers with reinforced metal, mainly used for oil or grease retention.

This type of oil seal uses a garter spring to maintain a constant radial load on the shaft to become more efficient. The Rubber covered at outer diameter press fits to create a positive seal with the housing bore.

The additional dust lip protects the mail sealing lip against dust and other foreign particles and therefore this type is suitable for use in polluted environments

Advantages:
- Good static sealing
- Compensation of different thermal expansion
- Reduced risk of fretting corrosion
- Effective protection against air side contaminants
- Modern lip design provides low radial forces

STANDARD SEAL MATERIALS

NBR: Temp -20F / +250F
FKM: Temp -40F / +400F

3) TB TYPE OIL SEAL (METAL OUTSIDE DOUBLE LIP)





The TB profile is a rotary shaft seal composed of a single external metal cage at outside with an internal rubber coating.

In this type root of the sealing lip is bonded to ID of metal ring.

A garter spring provides constant, uniform load of the lip on the shaft for the life of the seal. The spring keeps the elastomeric lip in contact with the shaft during higher shaft speeds and also helps offset normally occurring compression set and wear of the lip material. The secondary lip provides exclusion of light dust and fluid contaminants.

Advantages

- Good radial rigidity particularly for large diameters.
- Sealing for low and high viscosity fluids
- Modern primary sealing lip with low radial forces
- Protection against undesirable air contaminants

STANDARD SEAL MATERIALS

NBR: Temp -20F / +250F
FKM: Temp -40F / +400F

Metal Ring

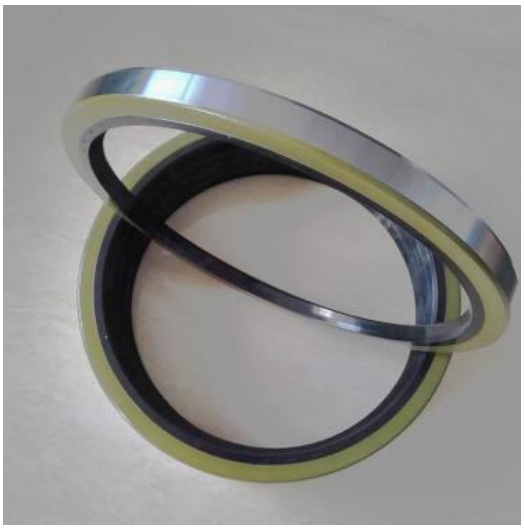
Steel - AISI 1010
Stainless steel - AISI 304
Stainless steel - AISI 316

Spring

Steel - AISI 1070 - 1090
Stainless steel - AISI 316

4) TA TYPE OIL SEAL (METAL OUTSIDE CLOSE-MOC DOUBLE LIP SEAL)





The TA profile is a rotary shaft seal composed of a single external metal cage at outside with an internal rubber coating and this rubber coating is covered with the another metal case

In this type root of the sealing lip is bonded to ID of outside metal ring.

Outer metal reinforced with inner metal to have structural rigidity

A garter spring provides constant, uniform load of the lip on the shaft for the life of the seal. The spring keeps the elastomer lip in contact with the shaft during higher shaft speeds and also helps offset normally occurring compression set and wear of the lip material. The secondary lip provides exclusion of light dust and fluid contaminants.

Advantages

- Good radial rigidity particularly for large diameters.
- Sealing for low and high viscosity fluids
- Modern primary sealing lip with low radial forces
- Protection against undesirable air contaminants
- Have greater strength then TB type

STANDARD SEAL MATERIALS

NBR: Temp -20F / +250F
FKM: Temp -40F / +400F

Metal Ring

Steel - AISI 1010
Stainless steel - AISI 304
Stainless steel - AISI 316

Spring

Steel - AISI 1070 - 1090
Stainless steel - AISI 316

5) TCR TYPE OIL SEAL



6) EXTERNAL LIP SEAL





Generally oil seals are held firmly in the stationary member and the inner lip maintains a line of contact with the rotary shaft, to give the sealing effect.

When the seal is to be fitted on to the rotary shaft and the sealing lip has to maintain the contact with the stationary member, the external lip seal is recommended.

Recommended Material

FKM: Temp -40F / +400F

Metal Ring- Stainless steel - AISI 304 / AISI 316

Spring - Stainless steel - AISI 316

7) TCY TYPE OIL SEAL





8) HYDRAULIC SEAL



A hydraulic seal is a relatively soft, non-metallic ring, captured in a groove or fixed in a combination of rings, forming a seal assembly, to block or separate fluid in reciprocating motion applications. Hydraulic seals are vital in machinery. Their use is critical in providing a way for fluid power to be converted to linear motion.

Hydraulic seals can be made from a variety of materials such as polyurethane, rubber or PTFE. The type of material is determined by the specific operating conditions or limits due to fluid type, pressure, fluid chemical compatibility or temperature.

Other materials to consider depending on your application are Viton, NBR, EPDM, and filled PTFE.

Types

- A **static hydraulic** seal is located in a groove and sees no movement - only sealing within its confined space, acting like a gasket. To achieve this, the gasket should be under pressure. The pressure is applied by tightening of the bolts.
- A type of **dynamic hydraulic** seal called a rod seal is exposed to movement on its inner diameter along the shaft or rod of a hydraulic cylinder. A type of dynamic hydraulic seal called a piston seal is exposed to movement on its outer diameter along the tube or bore of a hydraulic cylinder.

9) U SEAL RING



The **U-Ring** is a multipurpose seal that can be fitted either on a rod or on a single acting piston.

The **U-Rings** have high sealing properties and excellent resistance to abrasion, friction and wear. Its use is recommended with hydraulic oils, mineral oil-based hydraulic fluids, lubrication oils.

GASKET

A gasket is a mechanical seal which fills the space between two or more mating surfaces, generally to prevent leakage from or into the joined objects while under compression.

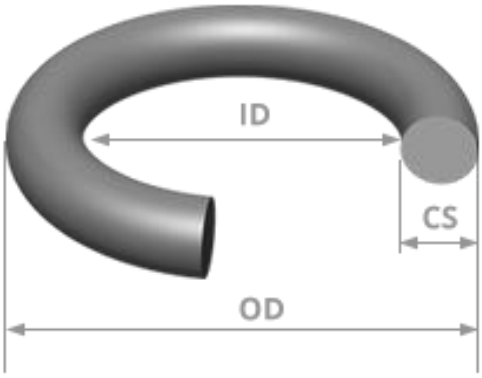
A wide range of elastomers can be used, such as neoprene, nitrile, EPDM and natural rubber. Rubber gaskets are used in a wide range of applications such as pipe gaskets, heat exchangers, and manways.

Materials Recommended

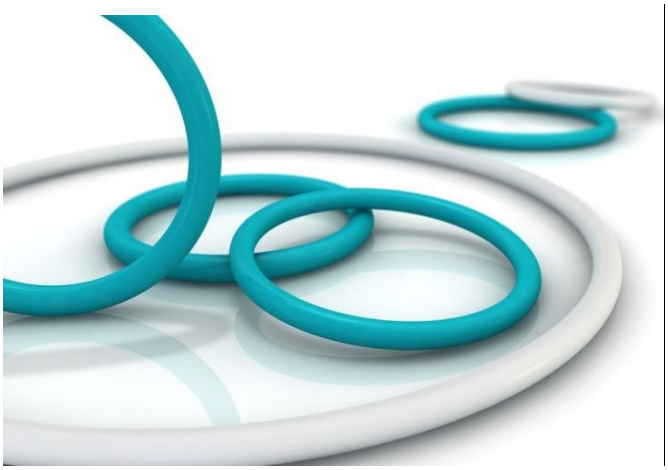
Nitrile (Buna – N),Viton (FKM), EPDM, Neoprene, Polyurethene, PTFE

RINGS

1) O – RING









An O-ring, also known as a packing, or a toric joint, is a mechanical gasket in the shape of a donut; it is a loop of elastomer with a round cross-section, designed to be seated in a groove and compressed during assembly between two or more parts, creating a seal at the interface.

The O-ring may be used in static applications or in dynamic applications where there is relative motion between the parts

Materials Recommended

Nitrile Rubber, Silicone, Polyurethane, Neoprene, Fluorocarbon as well as other elastomers.

Applications

Oil, Gas & Industrial - Valves, gas pumps, fittings, dispensers and storage tanks.

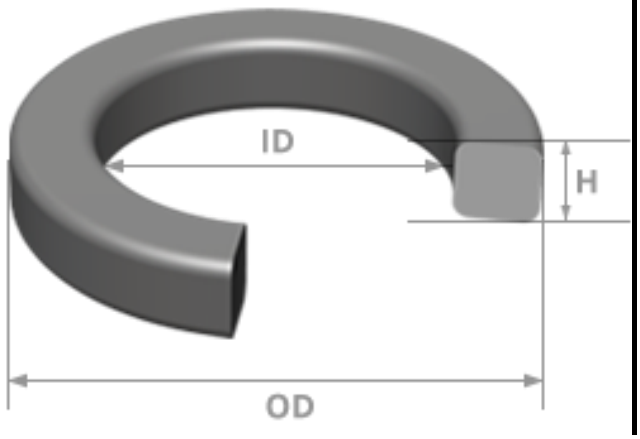
Transportation - In industries like passenger automotive, heavy duty trucking, and aerospace

Medical - Syringe, pump, filtration and connectors

Food & Beverage - Specialty 3A sanitary, NSF-61 and water service O-Rings and seals are ideal for the food processing, beverage dispensing and water filtration markets.

Along with individual sizes, We also have various **O Ring Kits**, they are as follows

2) SQUARE RING



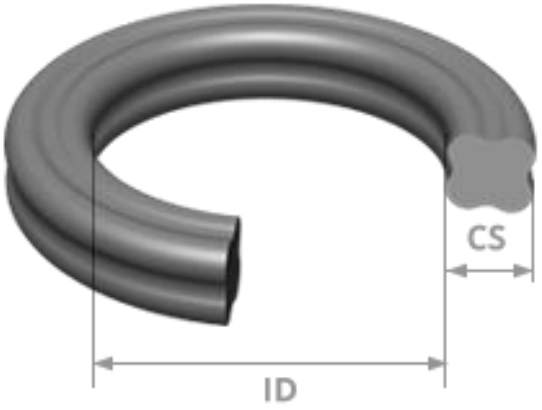


A Square-Ring is a sealing device made in the form of a torus, with a square shaped cross-section. It is available in a variety of elastomeric and thermoplastic materials. In most static applications, it is a direct replacement for an O-ring and generally will perform a high pressure gasketing function as well as or better than an O-ring.

Advantages

- Interchangeable with O-rings size for size (Standard AS568A sizes)
- Uses same groove as O-ring
- Can be used for radial seals
- Material is homogenous, no joints, no laminations
- Edges accurately formed
- Extreme close tolerances held on cross-section, I.D. and O.D.
- Controlled surface smoothness, hardness, elasticity, toxicity, texture
- The modern, economical option for static applications
- Available in many compounds

3) X – RING / QUAD RING / 4 LIP RING





The sealing principle of the Quad-Ring®/X-Ring is nearly the same as the O-ring sealing. The initial sealing is achieved by the diametrical squeeze in a right angled groove. The system pressure itself creates a positive sealing force.

Following are some advantages of Quad-Rings®/X-Rings:

• With X-Rings the standard grooves are deeper in comparison with O-ring glands. So the diametrical squeeze is lower than with O-rings. This makes dynamic sealing possible with reduced friction.

• The four lips of the X-Ring create more sealing capacity and at the same time a groove for lubrication, which is very favorable for dynamic sealing.

• The most important advantage of the X-Ring is the high stability for dynamic applications. In the situation that an O-ring rolls in the groove and creates torsion, a X-Ring will slide with no negative results.

• More resistant to spiral failure

MATERIAL

1) NITRILE RUBBER

Nitrile rubber, also known as NBR, Buna-N, and acrylonitrile butadiene rubber, is a synthetic rubber copolymer of acrylonitrile(ACN) and butadiene. Trade names include Perbunan, Nipol, Krynac and Europrene.

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

Thermal Properties

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

Environmental Performance

Colorability	Excellent
Flame Resistance	Poor
Gas Permeability	Fair to Excellent
Odour	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

2) VITON (FKM)

Viton is a brand of FKM, a synthetic rubber and fluoropolymer elastomer commonly used in O-rings, chemical-resistant gloves, and other moulded or extruded Goods.

Physical & Mechanical Properties

Durometer or Hardness Range	50 – 95 Shore A
Tensile Strength Range	500 – 2,000 PSI
Elongation (Range %)	400 % – 500 %
Abrasion Resistance	Fair to Good
Adhesion to Metal	Good to Excellent
Adhesion to Rigid Materials	Fair to Good
Compression Set	Good to Excellent
Flex Cracking Resistance	Fair to Good
Impact Resistance	Good
Resilience / Rebound	Poor to Fair
Tear Resistance	Fair to Good
Vibration Dampening	Fair to Good

Chemical Resistance

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

Thermal Properties

Low Temperature Range	-30º F to 0º F
Minimum for Continuous Use (Static)	+ 10º F to - 30º F
Brittle Point 0º F to	- 40º F
High Temperature Range	+ 450º F to + 500º F
Maximum for Continuous Use (Static)	+ 500º F

Environmental Performance

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

3) SILICONE RUBBER

Silicone rubber is an elastomer (rubber-like material) composed of silicone—itself a polymer—containing silicon together with carbon, hydrogen, and oxygen. Silicone rubber can be found in a wide variety of products, including: voltage line insulators, automotive applications; cooking, baking, and food storage products.

Physical & Mechanical Properties

Durometer or Hardness Range	20 – 90 Shore A
Tensile Strength Range	200 – 1,500 PSI
Elongation (Range %)	100 % – 900 %
Abrasion Resistance	Poor to Good
Adhesion to Metal	Good
Adhesion to Rigid Materials	Good
Compression Set	Good to Excellent
Flex Cracking Resistance	Poor to Good
Impact Resistance	Poor to Good
Resilience / Rebound	Good to Excellent
Tear Resistance	Poor to Good
Vibration Dampening	Fair to Good

Thermal Properties

Low Temperature Range	- 178º F to - 90º F
Minimum for Continuous Use (Static)	- 170º F
Brittle Point	- 178º F to - 60º F
High Temperature Range	+ 400º F to + 550º F
Maximum for Continuous Use (Static)	+ 550º F

Environmental Performance

Colorability	Excellent
Flame Resistance	Fair to Excellent

Gas Permeability	Poor to Fair
Odour	Good
Ozone Resistance	Excellent
Oxidation Resistance	Excellent
Radiation Resistance	Poor to Good
Steam Resistance	Fair to Good
Sunlight Resistance	Excellent
Taste Retention	Good to Excellent
Weather Resistance	Excellent
Water Resistance	Excellent

4) ETHYLENE PROPYLENE DIENE MONOMER RUBBER (EPDM)

EPDM rubber (ethylene propylene diene monomer rubber), is a type of synthetic rubber, which can be used in a wide range of applications. A common use is in vehicles: door seals, window seals, trunk seals, and sometimes hood seals.

Physical & Mechanical Properties

Durometer or Hardness Range	30 – 90 Shore A
Tensile Strength Range	500 – 2,500 PSI
Elongation (Range %)	100 % – 700 %
Abrasion Resistance	Good
Adhesion to Metal	Good to Excellent
Adhesion to Rigid Materials	Good to Excellent
Compression Set	Poor to Excellent
Flex Cracking Resistance	Good
Impact Resistance	Very Good
Resilience / Rebound	Fair to Good
Tear Resistance	Fair to Good
Vibration Dampening	Fair to Good

Chemical Resistance

Acids, Dilute	Excellent
Acids, Concentrated	Excellent
Acids, Organic (Dilute)	Excellent
Acids, Organic (Concentrated)	Fair to Good
Acids, Inorganic	Excellent
Alcohol's Good to	Excellent

Thermal Properties

Low Temperature Range	- 60º F to - 40º F
Minimum for Continuous Use (Static)	- 60º F
Brittle Point	- 70º F
High Temperature Range	+ 220º F to + 300º F
Maximum for Continuous Use (Static)	+ 300º F

Environmental Performance

Colorability	Good to Excellent
Flame Resistance	Poor
Gas Permeability	Fair to Good
Odour	Good
Ozone Resistance	Good to Excellent
Oxidation Resistance	Excellent
Radiation Resistance	Good to Excellent
Steam Resistance	Excellent
Sunlight Resistance	Excellent
Taste Retention	Good to Excellent

Weather Resistance	Excellent
Water Resistance	Excellent

5) NEOPRENE

Physical & Mechanical Properties

Durometer or Hardness Range	20 – 95 Shore A
Tensile Strength Range	500 – 3,000 PSI
Elongation (Range %)	100 % – 800 %
Abrasion Resistance	Very Good to Excellent
Adhesion to Metal	Excellent
Adhesion to Rigid Materials	Good to Excellent
Compression Set	Poor to Good
Flex Cracking Resistance	Good
Impact Resistance	Good to Excellent
Resilience / Rebound	Fair to Good
Tear Resistance	Good to Excellent
Vibration Dampening	Good to Excellent

Chemical Resistance

Acids, Dilute	Excellent
Acids, Concentrated	Poor
Acids, Organic (Dilute)	Good to Excellent
Acids, Organic (Concentrated)	Poor to Good
Acids, Inorganic	Good to Excellent

Thermal Properties

Low Temperature Range	- 70º F to - 30º F
Minimum for Continuous Use (Static)	- 80º F
Brittle Point	- 85º F
High Temperature Range	+ 200º F to + 250º
Maximum for Continuous Use (Static)	+ 250º F

Environmental Performance

Colorability	Fair
Flame Resistance	Fair to Good
Gas Permeability	Fair to Good
Odour	Fair to Good
Ozone Resistance	Good to Excellent
Oxidation Resistance	Good to Excellent
Radiation Resistance	Fair to Good
Steam Resistance	Fair to Good
Sunlight Resistance	Good to Excellent
Taste Retention	Fair to Good
Weather Resistance	Fair to Good
Water Resistance	Fair to Good

6) POLYESTER URETHENE R POLYURETHENE

Physical & Mechanical Properties

Durometer or Hardness Range	35 – 95 Shore A
Tensile Strength Range	500 – 6,000 PSI
Elongation (Range %)	250 % – 900 %
Abrasion Resistance	Excellent
Adhesion to Metal	Excellent
Adhesion to Rigid Materials	Good
Compression Set	Poor to Good
Flex Cracking Resistance	Fair to Good
Impact Resistance	Good to Excellent

Resilience / Rebound	Poor to Good
Tear Resistance	Good to Excellent
Vibration Dampening	Fair to Good

Chemical Resistance

Acids, Dilute	Fair to Good
Acids, Concentrated	Poor
Acids, Organic (Dilute)	Fair
Acids, Organic (Concentrated)	Poor
Acids, Inorganic	Poor to Fair
Alcohol's	Good

Thermal Properties

Low Temperature Range	- 65º F to - 40º F
Minimum for Continuous Use (Static)	- 65º F
Brittle Point	- 60º F to - 80º F
High Temperature Range	+ 180º F to + 220º F
Maximum for Continuous Use (Static)	+ 200º F

Environmental Performance

Colorability	Good to Excellent
Flame Resistance	Poor to Good
Gas Permeability	Good to Excellent
Odour	Excellent
Ozone Resistance	Excellent
Oxidation Resistance	Good to Excellent
Radiation Resistance	Good to Excellent
Steam Resistance	Poor
Sunlight Resistance	Good to Excellent
Taste Retention	Fair to Good
Weather Resistance	Excellent
Water Resistance	Poor to Good