IN-SEAL INTERNATIONAL
Product Catalogue

Website: www.In-Seal.com
Email: info@in-seal.com
A Unified Supplier of High Performance Sealing and Packing Products across Industries

Jointing Sheets and Mechanical Packings

Inseal supplies the finest quality Jointing Sheets and Mechanical Packings. Products are available in different grades within Asbestos and Non-Asbestos.

Industrial Gaskets - Spiral Wound, Metallic, CAF

Industrial Gaskets are offered in all sizes and all types of materials including Spiral Wound Gaskets, Metallic Jacketed Gaskets and CAF Gaskets.

PTFE Products - PTFE Tubing PTFE Lining

Inseal is a leading exporter of all types of PTFE products including sheets, rods, tubes, moulded components in addition to PTFE Lined Pipes and Fittings.

Rubber Products:
- Diaphragms
- Sheet
- Profiles

Inseal manufactures high quality rubber products including Diaphragms, Cords and Sheets – Materials include Viton, EPDM, NeoPrene, Nitrile, NBR and Butyle.

Valves and Other Insulation Materials

Inseal is the one-stop shop to supply all Industrial Valves, Asbestos and Non-Asbestos Millboards, Woollen Felt and other Engineering Plastic Products.
In-Seal Offers **NON-ASBESTOS** Mechanical Packings of various types applicable to a number of Industries

**Style 3**
- A PTFE fibrous packing having special DUPLEX BRAID to increase dimensional stability treated with inert high temperature lubricant. This packing is safe, non-toxic and flexible for use on pumps, for concentrated acids, alkalies, oils, solvents and gases. PH 0-14.

**Universal Rope**
- PTFE Universal Rope

**Style 36**
- A graphite bonded fluoropolymer fibre packing DUPLEX BRAIDED to improve thermal conductivity and lubricity for maintaining extremely low friction, chemical resistance and reduces maintenance cost. PH 1 - 14

**Style 66**
- A 100% pure graphite fibre packing treated with special high temperature lubricant to prevent seepage through the packing. This packing is self lubricating. PH 0 - 14
- Temperature: 650 °C
In-Seal Offers **ASBESTOS** Mechanical Packings of various types applicable to a number of Industries

| Style 1000 | • White Dry Asbestos Plaited Packing for general Steam and Insulation packing for hot gases, oven, autoclaves, etc  
• Temperature – 350 ºC |
| Style 1100 | • Asbestos Graphited, non-metallic. Lubricated and graphited, general-purpose asbestos packing for Glands for medium pressure conditions  
• Temperature – 325 ºC |
| Style 1094 | • High grade asbestos fibre yarn DUPLEX BRAIDED packing impregnated with special PTFE suspensoid for severe caustic and other corrosive chemical, solvents, oils and petroleum byproducts and oxygen service.  
• Temperature: -150 to 300 ºC |
| Style 1910 | • A closely braided high content asbestos yarn packing non-metallic lubricated with special heat resisting dry lubricant. Specially recommended for high pressure super-heated steam services.  
• Temperature – 540 ºC |
| Style 1916 | • Braided from high grade asbestos yarn suitably lubricated and reinforced with stainless steel wire. This is an ideal choice for high temperature valve application  
• Temperature – 815 ºC |
| Style 1800 | • Non-metallic asbestos lubricated and graphited packing for high pressure saturated super heated steam  
• Temperature – 490 ºC |
In-Seal Offers **ASBESTOS** Jointing Sheets of various types applicable to a number of Industries

- **Style 20**
  - **Lowe Pressure**
  - **Operating Pressure in Bar**: 25 bars

- **Style 51**
  - **High Pressure**
  - **Operating Pressure in Bar**: 50 bars

- **Style 39**
  - Max. Short Term Service Temperature: 400°C. Max. Continuous Service Temperature: 250°C. Max. Operating Temperature for Steam: 200°C. **Max.**
  - **Operating Pressure in Bar**: 80 bars

- **Style 54 HP SUPER**
  - **Operating Pressure in Bar**: 150 bars

- **Style 59**
  - **OIL**
  - **Operating Pressure in Bar**: 150 bars

- **Style 60**
  - **ACID**
  - **Operating Pressure in Bar**: 150 bars
In-Seal Offers **NON-ASBESTOS** Jointing Sheets of various types applicable to a number of Industries

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Color</th>
<th>Maximum Temperature</th>
<th>Maximum Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>AF – 111</td>
<td>RED &amp; GREEN</td>
<td>380°C.</td>
<td>35 kg/sq.cm.</td>
</tr>
<tr>
<td>AF – 120</td>
<td>GREEN</td>
<td>440°C.</td>
<td>80 kg/cm²</td>
</tr>
<tr>
<td>AF – 139</td>
<td>RED</td>
<td>440°C.</td>
<td>80 kg/cm²</td>
</tr>
<tr>
<td>AF – 154</td>
<td>YELLOW</td>
<td>550°C.</td>
<td>150 kg/cm²</td>
</tr>
<tr>
<td>AF – 159</td>
<td>GREY</td>
<td>550°C.</td>
<td>150 kg/cm²</td>
</tr>
<tr>
<td>AF – 160</td>
<td>BLUE</td>
<td>210°C.</td>
<td>150 kg/cm²</td>
</tr>
</tbody>
</table>
INSEAL Spiral Wound Gaskets are semi metallic products designed for high pressure and temperature applications. A variety of forms of the gasket are available and these can be manufactured in various materials or sizes to suit your requirement.

With over thousands of satisfied customers who have procured INSEAL spiral wound gaskets, we are confident that we can meet all your service requirements.

CAF / Non-Metallic Gaskets are die cut or circle cut from compressed asbestos fibre / non asbestos jointings which are manufactured from carefully selected fibre intimately blended with suitable heat resistant binders etc. and vulcanised into sheets of homogenous compositions and uniform thickness.

PTFE (Polytetrafluoroethylene) is an inert material and so has excellent chemical resistance. PTFE gaskets are mainly used in the presence of aggressive chemicals: such as acids, bases, and solvents.

PTFE has the following features:

- Outstanding chemical and heat resistance.
- Non-corrosive, non-wetting, non-contaminating and odourless.

Rubber is perhaps the most common type of jointing. Rubber Gaskets

- If your application involves potable (drinking) water you will require EPDM.
- If your application involves water you should consider using neoprene or EPDM. If you require a part with oil and fuel resistance, you should consider nitrile.
- The properties of the gasket will depend upon the type of rubber from which it is manufactured.
PTFE Rods are available from 3mm diameter up to all the regular standard dimensions. RAM extruded PTFE rods are also available in all standard fills: glass fiber (5%, 10%, 15%, 20% and 25%), carbon, bronze and in different colors.

PTFE Sheets exhibit astonishing chemical resistance. PTFE is a self lubricating material that provides a low friction coefficient and is ideally suited for the manufacture of corrosion-resistant gaskets and seals.

INSEAL also offers SKIVED Sheets.

PTFE Tapes are designed for most plumbing and pipe fitting. They are available in a variety of widths, lengths and thickness, in standard, medium, high density Premium PTFE Thread Seal Tapes are also available for specialized applications.

PTFE is a very popular material for O Rings. It is applicable in environments which require chemical resistance and non-compressible material.

PTFE and Teflon Bush are manufactured in a wide range of sizes.

PTFE protected diaphragms combine the chemical resistance associated with PTFE with the flex characteristics of an elastomer. A rubber back-up diaphragm is required to provide flexibility and memory.

Key Benefits:

1. CHEMICALLY INERT
   - PTFE is a chemically inert material and therefore commonly used against aggressive chemicals.

2. HEAT RESISTANT
   - PTFE has the ability to withstand a high range of temperatures up to 260 °C
   - PTFE has a melting point of 330 °C.

3. LOW COEFFICIENT OF FRICTION
   - PTFE has an extremely low coefficient of friction among polymers – between 0.05 to 0.10

4. CORROSION RESISTANT
   - PTFE is corrosion resistant and therefore used widely among a number of different industries.

In-Seal is one of the oldest suppliers of Pure and Graded PTFE Products.
Inseal is a leading supplier of PTFE / PFA / FEP Lined Pipes, Fittings, Valves and Bellows

PTFE Lined Piping System

PTFE Lined Pipe
PTFE Jacketed Pipe
CS PP Lined Pipes
PTFE Lined Elbow 90 deg
PTFE Lined Elbow 45 Deg
PFA/FEP Lined Tee
PFA Lined UN Equal Tee
PFA Lined Reducer
PP Reducing Flange Red.

PTFE Lined Ball Valve
PTFE Lined NRV Valve

High Pressure Lined Fittings

PTFE High Pressure Bellows
PFA Lined Lateral Tee

PTFE/PFA Lined Valves

PFA Lined Blanges
PTFE Lined Spacers
PP Reducing Flange Red.
PTFE Tubes are In-Seal’s premier products of the highest quality and competitive price

- If your temperature requirements range up to 500° F (260° C), PTFE Tubing (PolyTetraFluoroEthylene) is the recommended choice.
- It resists “melt-off” by soldering irons when making terminations. Because of its excellent dielectric properties, it is widely used in electronics and electrical service.
- Another key advantage of PTFE Tubing is its non-stick properties that allow the transport of materials with minimal fluid resistance.

INSEAL PTFE Tubes

- INSEAL has a full line of extruded PTFE Tubing used for protecting wiring or transporting fluids in critical applications. PTFE Tubing comes in various configurations as well as custom designs. PTFE Tubing outperforms glass and graphite by its inherent superior chemical resistivity and low coefficient of friction, making it an ideal material for fluid transfers.

PTFE Tubing Properties

- Non-stick properties
- Temperature resistance up to 260° C (500° F)
- Aging resistance
- Can be steam or chemically sterilized in-line
- Superior chemical resistivity and low coefficient of friction

PTFE Tubing Applications

- Aerospace & Transportation Technology
- Electronics, Components & Insulators
- Chemical & Pharmaceutical Manufacturing
- Food Processing, Environmental Sciences
- Fluid Transfer Devices and many more
In-Seal supplies a variety of rubber seals, gasket sheets and moulded products

- Inseal has been on the forefront of supplying quality rubber products to a number of industries within India and international markets. Inseal specializes in moulded customized rubber products:
- Inseal supplies a comprehensive range of rubber products:
  - Natural Rubber, Neoprene Rubber, Nitrile / NBR Rubber, EPDM Rubber, Viton Rubber, Butyl Rubber, Silicone Rubber
- Inseal offers all types of rubber products including: EPDM Rubber profiles, Butyl Sealant Tapes, Rubber Seals, Rubber O-Rings, Rubber Gasket Sheets, Rubber O-Rings, Rubber Diaphragms, and Rubber Moulded Products.

### EPDM Rubber Profiles
- EPDM is the one of the most preferred material around the world by engineers. A Thermoset Elastomer, it is amenable to many processes and when vulcanized offers excellent physical properties such as compression set resistance,

### Butyl Sealant Tapes
- Butyl sealant tapes are pressure induced sealing strips with strong adhesion capability. They are applied to a wide spectrum of surfaces as metals, glass and various other materials that make up for high-end applications from Telecommunications to Windmill Turbines.

### Rubber Seals / O-Rings
- Rubber O Rings are one of the more effective seals invented: A loop of elastomer with an O-shape cross section.
- O-rings are commonly made from viton, silicone, nitrile, and neoprene; and are available in metric and standard sizes.

### Rubber Sheets / Rubber Gaskets
- Rubber is perhaps the most common type of jointing.
- Parts can be manufactured from the following rubbers: Natural, Neoprene, Nitrile, EPDM, Silicone, Viton, Ethylene propylene, and Butyl.

### Rubber Diaphragm / Moulded Products
- Molded Elastomeric Diaphragms are tough, versatile dynamic seals that eliminate virtually all of the limitations associated with other sealing methods like U-cups, O-rings, metal bellows and flat die-cut diaphragms.
In-Seal is the one-stop shop for Industrial Valves, Automated and Lined Valves

- Inseal is widely known as the one-stop shop to source your industrial valve requirements. We offer a wide range of valves including Ball Valves, Gate Valves, Globe Valves, Check Valves, Butterfly Valves, and Diaphragm Valves.
- Inseal is the preferred choice of industrial valves since we offer a comprehensive range of materials to manufacture quality valves that will suit your temperature and pressure requirements and suitable for the medium its facilitating.

**Manual Valves**

Inseal offers a wide range of manual valves of the highest quality. Inseal offers manual valves of various sizes and can customize it according to the client specifications.

- Ball Valve
- Butterfly Valve
- Gate Valve
- Globe Valve

**Automated Valves**

Inseal offers a broad range of normally open and closed 2/2 way, 3/2 way, 4/2 way, 5/2 way, 5/3 way and 5/4 way solenoid valves. Inseals also offers rotatary actuators and other automated valves.

- Solenoid Valve
- Rotary Actuator

**PTFE Lined Valves**

Solution that provides in-home, in-office GSM or CDMA coverage through a femtocell. Standard handset is used and traffic is routed over IP from the subscriber premise.

- PTFE Lined Ball Valve
- PTFE Lined Pipes
- CS PP Lined Pipes
- PTFE Lined 90 degree Elbow
Inseal has a wide range of engineering plastics and insulation and other sealing products.

**Engineering Plastics**
- Nylon Rods
- Nylon Sheets
- PEEK Rods
- PEEK Sheets
- HDPE Rods
- HDPE Sheets
- Polypropylene Rods
- Polypropylene Sheets
- PVC Rods
- PVC Sheet
- UHMW-PE Rods
- UHMW-PE Sheet

**Heat Insulation Millboard**
- Asbestos Millboard Sheet
- Non-Asbestos Millboard Sheet

**Wool Felt**
- Wool Felt Sheets
- Wool Felt Gaskets
Inseal is the premier supplier of Engineering Wool Felt used by a number of industries in various applications.

**ENGINEERING WOOL FELT**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Soft</th>
<th>Medium</th>
<th>Hard</th>
</tr>
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<tbody>
<tr>
<td>Density</td>
<td>0.15 gm/cm³</td>
<td>0.28 gm/cm³ to 0.35 gm/cm³</td>
<td>0.36 gm/cm³ to 0.40 gm/cm³</td>
</tr>
<tr>
<td>Colour</td>
<td>White Natural Colour</td>
<td>White Natural Colour</td>
<td>White Natural Colour</td>
</tr>
<tr>
<td>Thickness</td>
<td>2mm to 50mm</td>
<td>2mm to 50mm</td>
<td>2mm to 50mm</td>
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**Wool Felt Wheels**

INSEAL supplies Felt wheels which are widely used for enhanced polishing relative to other materials. Wool Felt is an ideal material for a quality level of polish.

**Wool Felt Strips**

*Woollen Felt strips are mainly used for various types of machines and for cushioning of delicate parts.*

- Felt Polishing Wheels, Felt Balls, Felt Seals, Felt Gaskets

**Felt Strips and Discs**

INSEAL offers 100% Woolen Felt plates and Discs of density ranging from 0.20 gm/cm³ to 0.50 gm/cm³ and thickness between 2mm and 50mm.

**Colored Wool Felt**

INSEAL supplies and exports large quantities of coloured felts which have a number of applications. Coloured Felts are available in various sizes, colours, densities and dimensions. Thicknesses range from 2mm to 15mm.