

Uni-Seals Product Catalog

Category: Sheet



UNI-SEALS

Unimax International Limited

www.uni-seals.com

Index

Graphite Sheet

GS1000	Pure expanded graphite sheet	3
GS1100	Nuclear grade expanded graphite sheet	3
GS1000R1	Graphite sheet reinforced with tanged metal plate	4
GS1000R2	Graphite sheet reinforced with metal foil	5
GS1000R3	Graphite sheet reinforced with metal mesh	6

Asbestos Rubber Sheet

GS2100	Asbestos latex sheet	7
GS2160	Asbestos latex sheet roll	8
GS2100R	Reinforced asbestos latex sheet	9
GS2100R4	Asbestos latex sheet reinforced with tanged steel on both sides	9
GS2200	Asbestos rubber sheet	10
GS2200R	Reinforced asbestos rubber sheet	11
GS2300	Oil resistant asbestos rubber sheet	12
GS2300R	Reinforced oil resistant asbestos rubber sheet	13
GS2400	Acid resistant asbestos rubber sheet	14

Non-asbestos Sheet

GS3100	Non-asbestos latex sheet	15
GS3160	Non-asbestos latex sheet roll	16
GS3100R	Reinforced non-asbestos latex sheet	17
GS3100R4	Non-asbestos latex sheet reinforced with tanged steel on both sides	17
GS3200	Non-asbestos sheet	18
GS3300	Oil resistant non-asbestos sheet	19

PTFE Sheet

GS4000	Pure PTFE sheet	20
GS4010	PTFE molded sheet	20
GS4020	PTFE skived sheet	20
GS4100	Expanded PTFE sheet	21

Rubber Sheet

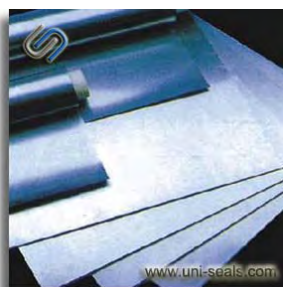
GS5100	NR rubber sheet	22
GS5100C	NR rubber sheet with cloth insertion	22
GS5200	NBR rubber sheet	22
GS5250	Gasoline resistant NBR rubber sheet	22
GS5300	SBR rubber sheet	22
GS5400	Neoprene rubber sheet	22
GS5500	EPDM rubber sheet	22
GS5600	Silicone rubber sheet	22
GS5700	FKM rubber sheet	22
GS5750	Hypalon rubber sheet	22
GS5800	Latex rubber sheet	22
GS5850	Butyl rubber sheet	22
GS5910	Insulation rubber sheet	22
GS5915	Antistatic rubber sheet	22
GS5920	Cold/heat resistant rubber sheet	22
GS5940	Acid & alkali resistant rubber sheet	22
GS5950	Fire resistant rubber sheet	22

GS5960	Food grade rubber sheet	22
GS5970	Damping rubber sheet	22
GS5980	Antiskid rubber sheet	22

Cork Sheet

GS8400	Cork sheet	23
GS8500	Rubber cork sheet	24

Expanded Graphite Sheet

**GS1000 Pure expanded graphite sheet**

Our GS1000 is selected from the high purity natural flake graphite. It is made through the advanced chemical treatment and mechanical procedure without fibers, binders or other additives.

It offers excellent sealing capabilities such as thermal stability, corrosion resistance, aging stability, self-lubricity, compressibility, and elasticity etc. It can serve for long time even under harsh working conditions with a very low maintenance cost. It is an ideal substitute for asbestos sheet.

GS1100 Nuclear grade expanded graphite sheet**Application:**

It is the basic material for making various kinds of reinforced graphite sheets, graphite tapes, packings and sealing gaskets. Widely used in chemical, automotive and pump, valve industries.

Specification:

Item	Industrial grade	Nuclear grade
Density	1.0g/cm ³	1.0g/cm ³
Tolerance of Density	±0.05g/cm ³	±0.04g/cm ³
Carbon Content	≥98%	≥99.5%
Tensile strength	≥4Mpa	≥5Mpa
Compressibility	≥30%	≥30%
Recovery	≥15%	≥15%
Sulphur content	≤1200ppm	≤700ppm
Chlorine content	≤50ppm	≤25ppm
Stress relaxation	≤10%	≤10%
Ignition loss	≤1.0%	≤0.5%

Service Limits:

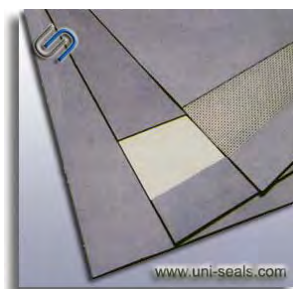
Temperature	-200°C~+650°C in oxidizing media -200°C~+3000°C in non-oxidizing media
Maximum pressure	30bar
PH range	0~14

Normal Dimension:

Item	Sheets	Rolls
Length	1000~2000mm	2~500m
Width	1000~2000mm	1000~2000mm
Thickness	0.2~4.0mm	0.15~1.5mm

Special density, thickness, shape or grade is available on request.

Graphite Sheet Reinforced with Tanged Metal Plate



GS1000R1 Graphite sheet reinforced with tanged metal plate

GS1000R1 is made from expanded flexible graphite sheet GS1000, reinforced by a tanged (perforated) metal plate insertion of stainless steel 1.4301 (304) or 1.4401 (316) in 0.1mm thickness, or carbon steel in 0.20~0.25mm thickness. No adhesive is required to bond the graphite layers as the graphite material is fixed to the insertion by small, sharp teeth, resulting in a sturdy gasket material which is relatively easy to process and handle.

Normal Style:

GS1000R1/304

GS1000R1/316

GS1000R1/CS (Carbon steel)

Properties:

Permanently elastic, even in hot-cold cycles over the entire temperature range, no aging, no brittleness, no hot or cold flow, long time uniform compressibility and resiliency independent of temperature.

Resistance to Media:

Steam, mineral oils, heat transfer oils, hydraulic oil, fuel, water, seawater, freshwater etc.

Application:

The sheet is mainly used for making cylinder gaskets of engines and punching into all kinds of sealing gaskets, which are frequently used in flange connections for piping and machinery. Its wide temperature range and excellent stress retention make it extremely suitable for use in steam systems, in chemical and petrochemical industries, processing industries, etc.

Specification:

Density of graphite	1.0g/cm ³
Temperature	-200°C~+550°C
Maximum pressure	300bar
Compressibility	15~35%
Recovery	≥15%
Stress relaxation	≤10%
PH range	0~14

Normal Dimension:

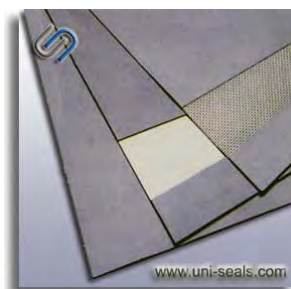
Length: 1000mm, 1500mm, 2000mm.

Width: 1000mm, 1500mm, 2000mm.

Thickness: 1.0~4.0mm.

Special density, thickness or insert materials are available on request.

Graphite Sheet Reinforced with Metal Foil



GS1000R2 Graphite sheet reinforced with metal foil

GS1000R2 is made from expanded flexible graphite sheet GS1000, reinforced by a smooth metal foil insertion of stainless steel 1.4301 (304), 1.4401 (316), or Nickel which is in 0.05mm thickness normally.

The graphite sheet is bonded to the insertion to form a sturdy gasket material which is relatively easy to process and handle.

Normal Style:

GS1000R2/304

GS1000R2/316

Properties:

Permanently elastic, even in hot-cold cycles over the entire temperature range, no aging, no brittleness, no hot or cold flow, long time uniform compressibility and resiliency independent of temperature.

Resistance to Media:

Steam, mineral oils, heat transfer oils, hydraulic oil, fuel, water, seawater, freshwater etc.

Application:

The sheet is mainly used for making cylinder gaskets of engines and punching into all kinds of sealing gaskets, which are frequently used in flange connections for piping and machinery. Its wide temperature range and excellent stress retention make it extremely suitable for use in steam systems, in chemical and petrochemical industries, processing industries, etc.

Specification:

Density of graphite	1.0g/cm ³
Temperature	-200°C~+550°C
Maximum pressure	200bar
Compressibility	35~50%
Recovery	≥10%
Stress relaxation	≤10%
PH range	0~14

Normal Dimension:

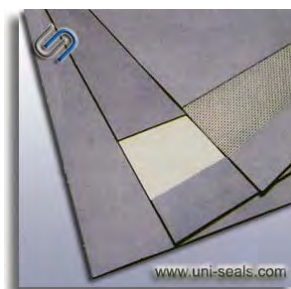
Length: 1000mm, 1500mm, 2000mm.

Width: 1000mm, 1500mm, 2000mm.

Thickness: 1.0~4.0mm.

Special density, thickness or insert materials are available on request.

Graphite Sheet Reinforced with Metal Mesh



GS1000R3 Graphite sheet reinforced with metal mesh

GS1000R3 is made from expanded flexible graphite sheet GS1000, reinforced by a metal mesh insertion of stainless steel 1.4301 (304), 1.4401 (316) or CS (carbon steel).

Normal Style:

GS1000R3/304

GS1000R3/316

GS1000R3/CS (Carbon steel)

Properties:

Permanently elastic, even in hot-cold cycles over the entire temperature range, no aging, no brittleness, no hot or cold flow, long time uniform compressibility and resiliency independent of temperature.

Resistance to Media:

Steam, mineral oils, heat transfer oils, hydraulic oil, fuel, water, seawater, freshwater etc.

Application:

The sheet is mainly used for making cylinder gaskets of engines and punching into all kinds of sealing gaskets, which are frequently used in flange connections for piping and machinery. Its wide temperature range and excellent stress retention make it extremely suitable for use in steam systems, in chemical and petrochemical industries, processing industries, etc.

Specification:

Density of graphite	1.0g/cm ³
Temperature	-200°C~+550°C
Maximum pressure	200bar
Compressibility	35~50%
Recovery	≥10%
Stress relaxation	≤10%
PH range	0~14

Normal Dimension:

Length: 1000mm, 1500mm, 2000mm.

Width: 1000mm, 1500mm, 2000mm.

Thickness: 1.0~4.0mm.

Special density, thickness or insert materials are available on request.

Asbestos Latex Sheet

**GS2100 Asbestos latex sheet**

The sheet is made from selected high quality asbestos fiber, synthetic latex binder and filling material through pulp and paper process. It has characteristic of heat-resistance, acid & alkali resistance, high strength, good compressibility and recovery. The sheet can be used in lubricating oil system with maximum temperature of 250°C.

Application:

Used as gasket material for explosion engine cylinder gaskets and chemical gaskets. Normally applied in automobile, motorcycle, farm machinery, engineering machinery etc.

Specification:

Style		GS2110	GS2112
Density		1.0±0.1g/cm ³	1.2±0.1g/cm ³
Transverse tensile strength		≥4.0Mpa	≥6.0Mpa
Compressibility		35~45%	23~37%
Recovery		≥30%	≥30%
Stress relaxation (100°C, 22h)		≤50%	≤50%
Ignition loss (850°C, 1h)		22~28%	22~30%
In water, 100°C, 22h	Thickness increase	≤15%	≤15%
	Weight increase	≤60%	≤50%
In H ₂ O:(CH ₂ OH) ₂ =1:1 100°C, 5h	Thickness increase	≤15%	≤17%
	Weight increase	≤80%	≤55%
In 20# aviation oil, 150°C, 5h	Thickness increase	≤15%	≤15%
	Weight increase	≤60%	≤50%
In ASTM fuel B, 25°C, 5h	Thickness increase	≤15%	≤15%
	Weight increase	≤45%	≤45%

Normal colour: dark grey.

Other colors are also available based on a minimum order quantity requirement.

Available with a anti-stick coating (style number: GS2110S, GS2112S) or graphite coating (style number: GS2110G, GS2112G) on the surfaces.

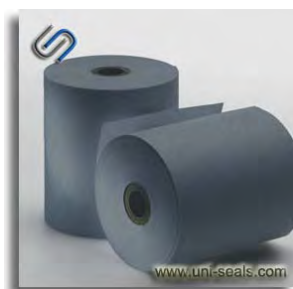
The sheet can be vulcanized upon special request (style number: GS2110V, GS2112V). The vulcanized sheet is harder and has smoother surfaces, and can be cut into all kinds of gaskets directly.

Normal Dimension:

Length: 600mm; 1200mm; 2400mm.

Width: 600mm; 1200mm.

Thickness: 0.4~3.0mm.

Asbestos Latex Sheet Roll**GS2160 Asbestos latex sheet roll**

The asbestos latex sheet is made from selected high quality asbestos fiber, latex binder and filling material. The final productions are supplied in big rolls through our unique production line. Length per roll could be ordered according to customer's special requirements. The maximum working temperature of the sheet reaches 250°C.

Application:

Used as gasket material for explosion engine cylinder gaskets and chemical gaskets. Normally applied in automobile, motorcycle, farm machinery, engineering machinery etc.

Specification:

Density		1.0±0.1g/cm ³
Transverse tensile strength		≥4.0Mpa
Compressibility		35~45%
Recovery		≥30%
Stress relaxation (100°C, 22h)		≤50%
Ignition loss (850°C, 1h)		22~28%
In water, 100°C, 22h	Thickness increase	≤15%
	Weight increase	≤60%
In H₂O:(CH₂OH)₂=1:1 100°C, 5h	Thickness increase	≤15%
	Weight increase	≤80%
In 20# aviation oil, 150°C, 5h	Thickness increase	≤15%
	Weight increase	≤60%
In ASTM fuel B, 25°C, 5h	Thickness increase	≤15%
	Weight increase	≤45%

Normal colour: dark grey.

Other colors are also available based on a minimum order quantity requirement.

Available with graphite coating on both surfaces (style number: GS2160G).

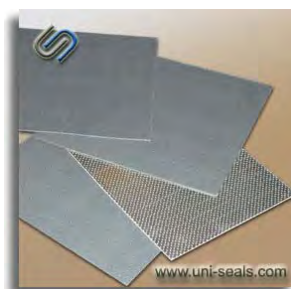
Normal Dimension:

Length: optional.

Width: 1500mm, 750mm, 500mm.

Thickness: 0.4~0.9mm.

Reinforced Asbestos Latex Sheet

**GS2100R Reinforced asbestos latex sheet**

The product is made from GS2100 asbestos latex sheet reinforced with 0.2~0.25mm tanged steel insertion. The normal steel material used is tin steel or galvanized carbon steel plate.

Application:

It is extensively used to manufacture various high strength gaskets, cylinder gaskets and motor gaskets. Mainly applied in automobile farming machine, motorcycle and engineering machinery etc.

Specification:

Thickness		0.5~1.0mm	1.1~2.0mm	>2.0mm
Density		2.0±0.5g/cm ³	2.0±0.5g/cm ³	2.0±0.5g/cm ³
Compressibility		25±10%	25±10%	25±10%
Recovery		≥35%	≥35%	≥40%
Ignition loss		≤25%	≤30%	≤35%
In H₂O:(CH₂OH)₂=1:1 120°C, 5h	Thickness increase	≤15%	≤15%	≤18%
	Weight increase	≤40%	≤40%	≤50%
In ASTM 3# oil, 150°C, 5h	Thickness increase	≤25%	≤25%	≤28%
	Weight increase	≤35%	≤35%	≤38%
In ASTM fuel B, 25°C, 5h	Thickness increase	≤30%	≤30%	≤33%
	Weight increase	≤35%	≤35%	≤38%

Normal colour: dark grey.

Available with anti-stick coating (style number: GS2100RS) or graphite coating (style number: GS2100RG) on the surfaces.

Normal Dimension:

500 x 1000mm; 500 x 1200mm; 500 x 1500mm; 1000 x 1000mm; 1000 x 1500mm.

Thickness: 1.0~2.6mm.

GS2100R4 Asbestos latex sheet reinforced with tanged steel on both sides

It is a composite sheet made from GS2100 asbestos latex sheet reinforced with 0.2~0.25mm tanged steel on both sides. The normal steel material used is tin steel or galvanized carbon steel plate.

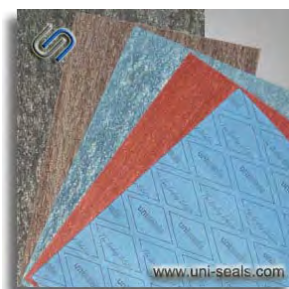
The sheet is extensively used to manufacture various exhaust gaskets for automobile and motorcycle.

Normal Dimension:

500 x 500mm; 500 x 1000mm.

Thickness: 1.2~2.5mm.

Asbestos Rubber Sheet

**GS2200 Asbestos rubber sheet**

Our asbestos rubber sheet is made from selected asbestos fibers, natural rubber, fillers and stainers. A price worthy quality of dependable performance, plus adaptability to many sealing requirements makes this material the most economical choice in the wide range of industrial fields.

Specification:

Style	GS2220	GS2230	GS2240	GS2245	GS2255
Density	1.8±0.2g/cm ³	1.8±0.2g/cm ³	1.8±0.2g/cm ³	1.8±0.2g/cm ³	1.8±0.2g/cm ³
Tensile strength	≥7Mpa	≥9Mpa	≥13Mpa	≥19Mpa	≥21Mpa
Compressibility	12±5%	12±5%	12±5%	12±5%	12±5%
Recovery	≥30%	≥30%	≥40%	≥45%	≥45%
Stress relaxation	≤50%	≤50%	≤45%	≤40%	≤40%
Maximum temperature	200°C	300°C	400°C	450°C	550°C
Maximum pressure	2.0Mpa	3.0Mpa	5.0Mpa	6.0Mpa	6.0Mpa
Resistance to media	Water, seawater, steam, alkali, gases, alcohols, salt solutions etc.				

Available colours: black, purple, red, grey etc.

Available inserted reinforcement: wire mesh insertion of tin steel, copper, SS304 etc (style number: GS2200R).

Available with anti-stick coating (style number: GS2200S) or graphite coating (style number: GS2200G) on the surfaces.

Normal Dimension:

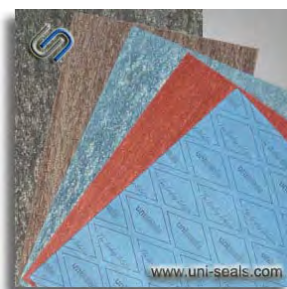
1270 x 1270mm; 3810 x 1270mm; 1000 x 1500mm;

2000 x 1500mm; 4000 x 1500mm; 3810 x 2700mm.

Thickness: 0.4~5.0mm.

Other dimensions are also available on request.

Reinforced Asbestos Rubber Sheet



GS2200R Reinforced asbestos rubber sheet

The product is made from asbestos rubber sheet with metal wire mesh insertion, offering better capability than the normal asbestos rubber sheet.

Specification:

Style	GS2220R	GS2230R	GS2240R	GS2245R	GS2255R
Density	1.9±0.2g/cm ³	1.9±0.2g/cm ³	1.9±0.2g/cm ³	1.9±0.2g/cm ³	1.9±0.2g/cm ³
Compressibility	12±5%	12±5%	12±5%	12±5%	12±5%
Recovery	≥30%	≥30%	≥40%	≥45%	≥45%
Stress relaxation	≤50%	≤50%	≤45%	≤40%	≤40%
Maximum temperature	220°C	320°C	420°C	470°C	570°C
Maximum pressure	3.0Mpa	4.0Mpa	5.5Mpa	6.5Mpa	6.5Mpa
Resistance to media	Water, seawater, steam, alkali, gases, alcohols, salt solutions etc.				

Available colours: black, purple, red, grey etc.

Available with anti-stick coating (style number: GS2200RS) or graphite coating (style number: GS2200RG) on the surfaces.

Normal Dimension:

1270 x 1270mm; 3810 x 1270mm; 1000 x 1500mm;

2000 x 1500mm; 4000 x 1500mm; 3810 x 2700mm.

Thickness: 0.8~5.0mm.

Other dimensions are also available on request.

Oil Resistant Asbestos Rubber Sheet

**GS2300 Oil resistant asbestos rubber sheet**

Our cost effective oil resistant asbestos rubber sheet is made from selected asbestos fibers, oil resistant rubber, fillers and stainers. Used in pipelines and apparatus of petrochemical & oil fields.

Specification:

Style	GS2325	GS2330	GS2340	GS2350
Density	1.8±0.2g/cm ³	1.8±0.2g/cm ³	1.8±0.2g/cm ³	1.8±0.2g/cm ³
Tensile strength	≥11Mpa	≥12Mpa	≥13Mpa	≥15Mpa
Compressibility	12±5%	12±5%	12±5%	12±5%
Recovery	≥40%	≥45%	≥50%	≥50%
Stress relaxation	≤45%	≤45%	≤40%	≤40%
Thickness increase (20# aviation oil)	≤20%	≤18%	≤15%	≤15%
Maximum temperature	250°C	300°C	400°C	500°C
Maximum pressure	2.5Mpa	3.0Mpa	4.0Mpa	5.0Mpa
Resistance to media	Oils, alkali, mild acid, water, steam, gases, alcohols etc.			

Available colours: black, green, blue, purple etc.

Available inserted reinforcement: wire mesh insertion of tin steel, copper, SS304 etc (style number: GS2300R).

Available with anti-stick coating (style number: GS2300S) or graphite coating (style number: GS2300G) on the surfaces.

Normal Dimension:

1270 x 1270mm; 3810 x 1270mm; 1000 x 1500mm;

2000 x 1500mm; 4000 x 1500mm; 3810 x 2700mm.

Thickness: 0.4~5.0mm.

Other dimensions are also available on request.

Reinforced Oil Resistant Asbestos Rubber Sheet

**GS2300R Reinforced oil resistant asbestos rubber sheet**

The product is made from oil resistant asbestos rubber sheet with metal wire mesh insertion, offering better capability than the normal oil resistant asbestos rubber sheet.

Specification:

Style	GS2325R	GS2330R	GS2340R	GS2350R
Density	1.9±0.2g/cm ³	1.9±0.2g/cm ³	1.9±0.2g/cm ³	1.9±0.2g/cm ³
Compressibility	12±5%	12±5%	12±5%	12±5%
Recovery	≥40%	≥45%	≥50%	≥50%
Stress relaxation	≤45%	≤45%	≤40%	≤40%
Thickness increase (20# aviation oil)	≤20%	≤18%	≤15%	≤15%
Maximum temperature	270°C	320°C	420°C	520°C
Maximum pressure	3.5Mpa	4.0Mpa	4.5Mpa	5.5Mpa
Resistance to media	Oils, alkali, mild acid, water, steam, gases, alcohols etc.			

Available colours: black, green, blue, purple etc.

Available with anti-stick coating (style number: GS2300RS) or graphite coating (style number: GS2300RG) on the surfaces.

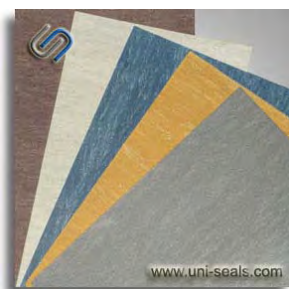
Normal Dimension:

1270 x 1270mm; 3810 x 1270mm; 1000 x 1500mm;
2000 x 1500mm; 4000 x 1500mm; 3810 x 2700mm.

Thickness: 0.8~5.0mm.

Other dimensions are also available on request.

Acid Resistant Asbestos Rubber Sheet



GS2400 Acid resistant asbestos rubber sheet

Our acid resistant asbestos rubber sheet is made of selected asbestos fiber with acid-resisting synthetic rubber through compression heating and compression molding.

Application:

Mainly used for the equipments in acid, and used as sealing gaskets for the flange of pipeline joints.

Specification:

Style		GS2430
Density		1.8±0.2g/cm ³
Tensile strength		≥12Mpa
Compressibility		12±5%
Recovery		≥40%
Stress relaxation		≤50%
Maximum temperature		300°C
Maximum pressure		3.0Mpa
Weight increasing	96.17%(H ₂ SO ₄) =18mol/L*48h	≤30%
	36.97%(HCL)=12mol/L*48h	≤25%
	10% (HNO ₃)= 1.67mol/L*48h	≤20%

Normal Dimension:

1270 x 1270mm; 3810 x 1270mm; 1000 x 1500mm; 2000 x 1500mm; 4000 x 1500mm.

Thickness: 0.4~5.0mm.

Other dimensions are also available on request.

Non-asbestos Latex Sheet



GS3100 Non-asbestos latex sheet

The sheet is made from selected high quality non-asbestos fiber, NBR latex binder and inorganic filling material through pulp and paper process. It has characteristic of heat-resistance, acid & alkali resistance, high strength, good compressibility and recovery. The sheet can be used in lubricating oil system with maximum temperature of 200°C. GS3100 is **100% asbestos free**.

Application:

Used as gasket material for explosion engine cylinder gaskets and chemical gaskets. Normally applied in automobile, motorcycle, farm machinery, engineering machinery etc.

Specification:

Density		1.0±0.1g/cm ³
Transverse tensile strength		≥10Mpa
Compressibility		20~30%
Recovery		≥30%
Ignition loss		≤70%
In H₂O: (CH₂OH)₂=1:1 100°C, 5h	Thickness increase	≤50%
	Weight increase	≤80%
In ASTM 3# oil, 150°C, 5h	Thickness increase	≤20%
	Weight increase	≤50%
In ASTM fuel B, 25°C, 5h	Thickness increase	≤20%
	Weight increase	≤40%

Normal colour: dark grey.

Other colors are also available based on a minimum order quantity requirement.

Available with anti-stick coating (style number: GS3100S) or graphite coating (style number: GS3100G) on the surfaces.

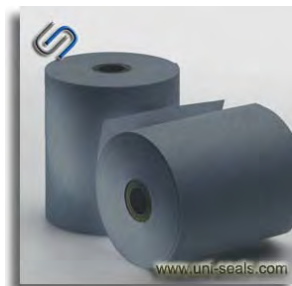
Normal Dimension:

Length: optional.

Width: 1500mm, 750mm, 500mm, etc.

Thickness: 0.4~0.8mm.

Non-asbestos Latex Sheet Roll



GS3160 Non-asbestos latex sheet roll

The sheet is made from selected high quality non-asbestos fiber, NBR latex binder and inorganic filling material. The final productions are supplied in big rolls through our unique production line. Length per roll could be ordered according to customer's special requirements. The maximum working temperature of the sheet reaches 200°C.

GS3160 is **100% asbestos free**.

Application:

Used as gasket material for explosion engine cylinder gaskets and chemical gaskets. Normally applied in automobile, motorcycle, farm machinery, engineering machinery etc.

Specification:

Density		1.0±0.1g/cm ³
Transverse tensile strength		≥10Mpa
Compressibility		20~30%
Recovery		≥30%
Ignition loss		≤70%
In H₂O: (CH₂OH)₂ = 1:1 100°C, 5h	Thickness increase	≤50%
	Weight increase	≤80%
In ASTM 3# oil, 150°C, 5h	Thickness increase	≤20%
	Weight increase	≤50%
In ASTM fuel B, 25°C, 5h	Thickness increase	≤20%
	Weight increase	≤40%

Normal colour: dark grey.

Other colors are also available based on a minimum order quantity requirement.

Available with graphite coating on both surfaces (style number: GS3160G).

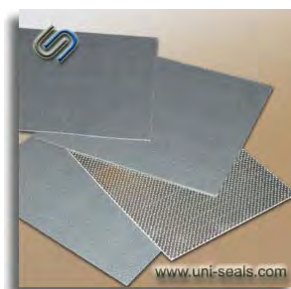
Normal Dimension:

Length: optional.

Width: 1500mm, 750mm, 500mm, etc.

Thickness: 0.4~0.8mm.

Reinforced Non-asbestos Latex Sheet



GS3100R Reinforced non-asbestos latex sheet

The product is made from GS3100 non-asbestos latex sheet reinforced with 0.2~0.25mm tanged steel insertion. The normal steel material used is tin steel or galvanized carbon steel plate.

Application:

It is extensively used to manufacture various high strength gaskets, cylinder gaskets and motor gaskets. Mainly applied in automobile farming machine, motorcycle and engineering machinery etc.

Specification:

Thickness		<1.5mm	1.5~2.0mm	>2.0mm
Density		1.8±0.5g/cm ³	1.8±0.5g/cm ³	1.8±0.5g/cm ³
Compressibility		18±8%	20±8%	22±8%
Recovery		≥35%	≥35%	≥35%
Stress relaxation (100°C, 22h)		≤30%	≤35%	≤35%
Ignition loss		≤20%	≤20%	≤20%
In ASTM 3# oil, 150°C, 5h	Thickness increase	≤20%	≤20%	≤20%
	Weight increase	≤20%	≤20%	≤20%
In ASTM fuel B, 25°C, 5h	Thickness increase	≤15%	≤15%	≤15%
	Weight increase	≤15%	≤15%	≤15%
Heat aging 150°C, 22h	Compressibility	12±5%	12±5%	12±5%
	Recovery	≥45%	≥50%	≥55%
	Thickness change	≤0±5%	≤0±5%	≤0±5%
	Weight change	≤0±5%	≤0±5%	≤0±5%

Normal colour: dark grey.

Available with anti-stick coating (style number: GS3100RS) or graphite coating (style number: GS3100RG) on the surfaces.

Normal Dimension:

500 x 1000mm; 500 x 1200mm; 500 x 1500mm; 1000 x 1000mm; 1000 x 1500mm.

Thickness: 1.0~2.6mm.

GS3100R4 Non-asbestos latex sheet reinforced with tanged steel on both sides

It is a composite sheet made from GS3100 non-asbestos latex sheet reinforced with 0.2~0.25mm tanged steel on both sides. The normal steel material used is tin steel or galvanized steel plate.

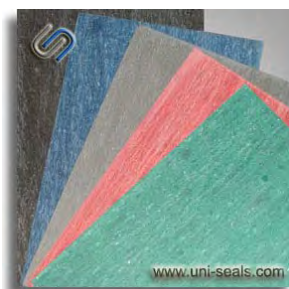
The sheet is extensively used to manufacture various exhaust gaskets for automobile and motorcycle.

Normal Dimension:

500 x 500mm; 500 x 1000mm.

Thickness: 1.2~2.5mm.

Non-asbestos Sheet



GS3200 Non-asbestos sheet

Our non-asbestos sheet is made from synthetic fibers, natural rubber, fillers and stainers, compressed and calendered under high temperature and pressure into a sheet form. It is an ideal substitute for asbestos rubber sheet.

Specification:

Style	GS3220	GS3230	GS3240
Density	1.8±0.2g/cm ³	1.8±0.2g/cm ³	1.8±0.2g/cm ³
Tensile strength	≥6Mpa	≥8Mpa	≥10Mpa
Compressibility	12±5%	12±5%	12±5%
Recovery	≥35%	≥45%	≥50%
Stress relaxation	≤45%	≤45%	≤40%
Maximum temperature	200°C	300°C	400°C
Maximum pressure	1.5Mpa	3.0Mpa	4.0Mpa
Resistance to media	Water, seawater, steam, gases, alkali, salt solutions etc.		

Available colours: black, green, blue, red etc.

Available inserted reinforcement: tin steel, copper, SS304 etc wire mesh insertion (style number: GS3200R).

Available with anti-stick coating (style number: GS3200S) or graphite coating (style number: GS3200G) on the surfaces.

Normal Dimension:

1270 x 1270mm; 3810 x 1270mm; 1000 x 1500mm; 2000 x 1500mm; 4000 x 1500mm.

Thickness: 0.4~5.0mm.

Other dimensions are also available on request.

Oil Resistant Non-asbestos Sheet

**GS3300 Oil resistant non-asbestos sheet**

Our oil resistant non-asbestos sheet is made from Kevlar fibers, oil resistant rubber, fillers and stainers, compressed and calendered under high temperature and pressure into a sheet form. It is an ideal substitute for asbestos rubber sheet.

Specification:

Style	GS3320	GS3330	GS3340
Density	1.8±0.2g/cm ³	1.8±0.2g/cm ³	1.8±0.2g/cm ³
Tensile strength	≥6Mpa	≥8Mpa	≥10Mpa
Compressibility	12±5%	12±5%	12±5%
Recovery	≥40%	≥50%	≥55%
Stress relaxation	≤45%	≤45%	≤40%
Thickness increase (20# aviation oil)	≤25%	≤15%	≤15%
Maximum temperature	200°C	300°C	400°C
Maximum pressure	2.0Mpa	3.0Mpa	4.0Mpa
Resistance to media	Water, steam, oil, gases, alkali, salt solutions etc.		

Available colours: black, green, blue, red etc.

Available inserted reinforcement: tin steel, copper, SS304 etc wire mesh insertion (style number: GS3300R).

Available with anti-stick coating (style number: GS3300S) or graphite coating (style number: GS3300G) on the surfaces.

Normal Dimension:

1270 x 1270mm; 3810 x 1270mm; 1000 x 1500mm; 2000 x 1500mm; 4000 x 1500mm.

Thickness: 0.4~5.0mm.

Other dimensions are also available on request.

PTFE Sheet



PTFE (polytetrafluoroethylene) has the best chemical resistance among known plastics. It also has good aging stability, electrical insulation, wear resistance, and extremely low friction coefficient. The unloaded operating temperature range is $-180\sim+260^{\circ}\text{C}$, and the dielectric strength is more than 10KV/mm.

GS4000 Pure PTFE sheet

Uni-seals PTFE sheet is molded or skived from 100% virgin PTFE resin. Available to be etched on one side or both sides (style number: GS4000E).

Application:

Used as sealing material, electrical insulating parts, lining pads, etc.

Specification:

Density	Tensile strength	Elongation at break	Temperature	Maximum pressure
2.1~2.3g/cm ³	≥15Mpa	≥150%	-180°C~+260°C	10Mpa

GS4010 PTFE molded sheet

PTFE sheets with thickness over 3mm are normally manufactured by molding method.

Normal Dimension:

Size	Thickness	Tolerance
150 x 150mm	1.0~30mm	±0.30~±0.50mm
250 x 250mm	1.5~30mm	±0.30~±0.50mm
300 x 300mm	1.5~30mm	±0.30~±0.50mm
450 x 450mm	1.5~30mm	±0.30~±0.50mm
600 x 600mm	2.0~30mm	±0.30~±0.50mm
800 x 800mm	3.0~30mm	±0.30~±0.50mm
1000 x 1000mm	3.0~30mm	±0.30~±0.50mm
1200 x 1200mm	3.0~30mm	±0.30~±0.50mm
1000 x 2000mm	5.0~35mm	±0.30~±0.60mm
1500 x 1500mm	5.0~30mm	±0.30~±0.50mm
1800 x 1800mm	8.0~30mm	±0.30~±0.50mm
2000 x 2000mm	8.0~30mm	±0.30~±0.50mm

GS4020 PTFE skived sheet

Virgin PTFE resin is firstly molded into a blank rod, and then skived into sheet. PTFE sheets with thickness of 3mm and less are normally manufactured by this method.

Normal Dimension:

Thickness: 0.5~3mm; Width: 900mm, 1000mm, 1200mm; Length: ≥200mm.

Expanded PTFE Sheet



GS4100 Expanded PTFE sheet

Our expanded PTFE sheet is made from 100% PTFE through special manufacturing process. Composed of innumerable multidirectional fibers, the product has a particular high density fiber texture. Under pressure the fibers will mutually tangle, making the texture even tighter and resulting in better sealing performance.

Expanded PTFE sheet has fine flexibility, high tensile strength, good resistance to temperature, creep, cold flow, corrosion, and aging. It is non-toxic and non-pollution, easy to cut and install, and not easy to distort.

The material may seal rough and damaged flange, and maintains excellent sealing performance even under severe corrosive environment and high temperature.

Application:

The product is suitable with all kinds of flanges. Widely used in industries of chemical, petroleum, nuclear power, steelmaking, papermaking, shipbuilding, semiconductor, aerospace, food, pharmacy, medical instrument, and so on.

Specification:

Temperature	-260°C~+260°C
Maximum pressure	20Mpa
Compressibility	66%
Recovery	16%
PH range	0~14

Normal Dimension:

60" x 60" x 1/16" (1.5m x 1.5m x 1.5mm);

60" x 60" x 1/8" (1.5m x 1.5m x 3.0mm);

60" x 60" x 1/4" (1.5m x 1.5m x 6.0mm).

Rubber Sheet



Rubber sheet NR, NBR, SBR, Neoprene, EPDM, Silicone, FKM, Hypalon, Latex, Butyl, ...

Uni-seals rubber sheets are manufactured to different requirements such as oil resisting, acid and alkali resisting, cold and heat resisting, insulation and antistatic etc. They can be easily cut into various gaskets and used in medical, chemical, electronic, fire resisting and food industries. They are also widely used as seals, buffer ring, rubber mat, sealing strip, paving material for steps and ground of hotel, boat, ship, vehicle, flight, and so on.

Specification:

Style	Density	Tensile strength	Elongation	Hardness (shore A)	Suggested Temperature
GS5100 NR rubber sheet	1.6g/cm ³	2.5Mpa	200%	70±5	-30°C~+70°C
GS5100C NR rubber sheet with cloth insertion	1.6g/cm ³	2.5Mpa	200%	70±5	-30°C~+70°C
GS5200 NBR rubber sheet	1.5g/cm ³	3.0Mpa	200%	65±5	-30°C~+70°C
GS5250 Gasoline resistant NBR rubber sheet	1.5g/cm ³	3.0Mpa	300%	70±5	-30°C~+70°C
GS5300 SBR rubber sheet	1.6g/cm ³	2.5Mpa	250%	70±5	-30°C~+70°C
GS5400 Neoprene rubber sheet	1.5g/cm ³	3.0Mpa	200%	65±5	-30°C~+70°C
GS5500 EPDM rubber sheet	1.4g/cm ³	4.0Mpa	200%	60±5	-40°C~+150°C
GS5600 Silicone rubber sheet	1.25g/cm ³	7.5Mpa	300%	50±5	-40°C~+200°C
GS5700 FKM rubber sheet	2.0g/cm ³	8.5Mpa	200%	70±5	-45°C~+250°C
GS5750 Hypalon rubber sheet	1.5g/cm ³	5.0Mpa	200%	70±5	-40°C~+250°C
GS5800 Latex rubber sheet	1.2g/cm ³	17.0Mpa	500%	45±5	-30°C~+70°C
GS5850 Butyl rubber sheet	1.4g/cm ³	4.0Mpa	350%	65±5	-30°C~+120°C
GS5910 Insulation rubber sheet	1.6g/cm ³	2.7Mpa	200%	70±5	-30°C~+70°C
GS5915 Antistatic rubber sheet	1.55g/cm ³	3.0Mpa	150%	75±5	-30°C~+70°C
GS5920 Cold/heat resistant rubber sheet	1.6g/cm ³	3.5Mpa	280%	65±5	-40°C~+150°C
GS5940 Acid & alkali resistant rubber sheet	1.6g/cm ³	2.5Mpa	200%	70±5	-30°C~+70°C
GS5950 Fire resistant rubber sheet	1.8g/cm ³	3.0Mpa	200%	70±5	-30°C~+100°C
GS5960 Food grade rubber sheet	1.65g/cm ³	4.0Mpa	350%	65±5	-30°C~+100°C
GS5970 Damping rubber sheet	1.8g/cm ³	2.0Mpa	200%	65±5	-30°C~+70°C
GS5980 Antiskid rubber sheet	1.6g/cm ³	3.0Mpa	200%	70±5	-30°C~+70°C

* Data listed are normal typical specifications. Special specifications and technical requirements are also available on request.

* Standard condition: 25°C. Data could vary under different temperature.

Surfaces of rubber sheets are normally in smooth finish. Cloth impression surfaces are also available on request (style number: GS5***P).

All rubber sheets can be reinforced with one layer or multi-layers of inserted fabric cloth (style number: GS5***C), or reinforced with inserted metal wire mesh (style number: GS5***M).

See more details in Uni-seals catalogue "Rubber Sheet" category.

Cork Sheet



GS8400 Cork sheet

It is made of clean granulated cork mixed with resin binder, which is compressed to form block, then split into sheets. The sheet has properties of good resilience, good resistance to water, oil and solvents, and good compressibility etc.

Specification:

Distinguish from granule grade:

Granule grade	Big	Middle	Small
Granules size	8~12/inch	12~24/inch	30~60/inch
Tensile strength	8kg/cm ²	12kg/cm ²	12kg/cm ²
Compressibility (100psi load)	15~40%	10~30%	5~25%
Recovery	75%	65%	60%
Flexibility multiple	15	12	15
Boiling water resistance	3hours	5hours	5hours

According with the standard ISO4714.

Distinguish from density:

	Low	Middle	High
Density	270kg/m ³	320kg/m ³	380kg/m ³

Forms of Supply:

Sheets: 915 x 610 x 0.8~100mm.

Roll: 1220mm x length x 1~6mm

Cut gasket GA8400, dimensions according to drawings or standards.

Rubber Cork Sheet



GS8500 Rubber cork sheet

It is a compound of cork and rubber, made from granulated cork and synthetic rubber polymer and their assistants. The product has properties of both high resilience of rubber and compressibility of cork, so the performance is excellent. It can be used as gaskets for various engines of automobiles, tractors, planes, ships and petroleum pipes, transformers, electric equipments and apparatuses. It is a new type high-grade static sealing material under low and medium pressure.

Specification:

Hardness	55~70 shore A
Density	≤900kg/m ³
Tensile Strength	≥15kg/cm ²
Compressibility (300psi load)	15~30%
Sealing Pressure	≥28kg/cm ²
Internal Pressure	≤3.5kg/cm ²
Service Temperature	-40°C~150°C

Forms of Supply:

Sheets: 915 x 610 x 0.8~100mm.

Cut gasket GA8500, shapes and dimensions according to drawings or standards.

**Note:**

1. All technical details quoted throughout this catalogue are based on our extensive tests and years of experience, however, they can only serve as guide values. Your specific application should not be undertaken without independent study and evaluation for suitability. Failure to select proper products and specifications could result in property damage and/or personal injury.
2. Technical details subject to change without notice. This edition cancels all previous issues.

UN-CTLG-ST-100316