

## **SHEET RUBBER & FLUID SEALING PRODUCTS**



Excellent gasket material with good chemical and petroleum resistance. Excellent sealability in oil, gasoline, mild chemical, water, and other fluid applications. See our commercial flange gasket chart for information on standard gasket sizes.

TENSILE STRENGTH	2400 PSI	MAX P x T	1/32", 1/16" - 350,000 (°F x PSIG) 1/8" - 250,000 (°F x PSIG)
MAX TEMPERATURE	430°F continuous 720°F maximum	DENSITY	100 lbs/ft <sup>3</sup>
MAX PRESSURE	1000 PSI	WEIGHT (SF, 1/8")	1.12 lbs
COLOR	Branded/Unbranded Green/Blue	ASTM-D-F104 CALL OUT	F711111B4E21M5

#### INDUSTRY CROSSOVER: 3000, C4401

## **COMPRESSED GASKET SHEET** with SBR BINDER

Constructed from aramid fibers and an SBR binder this material serves in water, inert gases, and saturated steam applications (saturated steam under 150psi). Provides excellent sealability and drastically lowered emission levels.

TENSILE STRENGTH	2250 PSI	MAX P x T	1/32", 1/16" - 350,000 (°F x PSIG) 1/8" - 250,000 (°F x PSIG)
MAX TEMPERATURE	400°F continuous 700°F maximum	DENSITY	1.6 g/cm²
MAX PRESSURE	1200 PSI	WEIGHT (SF, 1/8")	0.988 lbs

#### INDUSTRY CROSSOVER: 3200, 3400, C6400



## **COMPRESSED GASKET SHEET** with NEOPRENE BINDER

Constructed from aramid fibers and a neoprene binder this sheet serves in water, refrigerant, oil, fuel, and saturated steam applications (saturated steam under 150psi). Provides excellent sealability and drastically lowered emission levels.

TENSILE STRENGTH	1500 PSI	MAX P x T	1/32", 1/16" - 400,000 (°F x PSIG) 1/8" - 275,000 (°F x PSIG)
MAX TEMPERATURE	550°F CONTINUOUS 800°F MAXIMUM	DENSITY	110 lbs/ft <sup>3</sup>
MAX PRESSURE	1200 PSI	WEIGHT (SF, 1/8")	1.040 lbs

INDUSTRY CROSSOVER: 3300, C5400

## **COMPRESSED GASKET SHEET** with EPDM BINDER

Constructed from aramid fibers and an EPDM binder this material serves in water, inert gases, and saturated steam applications (saturated steam under 150psi). Provides excellent sealability and drastically lowered emission levels.

TENSILE STRENGTH	2500 PSI	MAX P x T	1/32", 1/16" - 350,000 (°F x PSIG) 1/8" - 250,000 (°F x PSIG)
MAX TEMPERATURE	400°F continuous 700°F maximum	DENSITY	110 lbs/ft³
MAX PRESSURE	1200 PSI	WEIGHT (SF, 1/8")	0.972 lbs

#### INDUSTRY CROSSOVER: 3700, C7400

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## **INORGANIC FIBER GASKET SHEET**

Constructed with inorganic fibers with a nitrile binder. Reduced creep relaxation and improved torque retention provide optimal sealing. Most inorganic fiber gasket sheets are ABS Fire Safe Type approved.

TENSILE STRENGTH	1500 PSI	MAX P x T	1/32", 1/16" - 400,000 (°F x PSIG) 1/8" - 275,000 (°F x PSIG)
MAX TEMPERATURE	550°F continuous 800°F maximum	DENSITY	110 lbs/ft <sup>3</sup>
MAX PRESSURE	1200 PSI	WEIGHT (SF, 1/8")	1.040 lbs

INDUSTRY CROSSOVER: IFG-5500, C4433

## **OIL PAPER / VEGETABLE FIBER**

Premium grade vegetable fiber sheet packing, efficiently saturated with a glue-glycerin impregnant rendered insoluble by means of a tanning agent to create a strong, flexible, all-proof packing.

COLOR	TAN/BROWN	MAX TEMPERATURE	250°F
PRESSURE	1000 PSI	TENSILE STRENGTH	2000 PSI
COMPRESSABILITY	25% - 40%		



These high-temperature gasket materials excel in the harshest conditions- intense heat, high pressure, saturated steam and hot oils. The complex engineering process involves laboratory tests for fire safety. They maintain effective seal during pressure and temperature fluctuations. Superior torque retention lowers leakage rates and reduces maintenance time.



## **GRAPHITE COMPRESSED** with NITRILE BINDER

TENSILE STRENGTH	1800 PSI	MAX P x T	1/32", 1/16" - 700,000 (°F x PSIG) 1/8" - 350,000 (°F x PSIG)
MAX TEMPERATURE	650°F continuous 1000°F maximum	DENSITY	110 lbs/ft <sup>3</sup>
MAX PRESSURE	2000 PSI	WEIGHT (SF, 1/8")	1.190 lbs

INDUSTRY CROSSOVER: G-9900

## **CARBON FIBER COMPRESSED** with NITRILE BINDER

TENSILE STRENGTH	1500 PSI	MAX P x T	1/32", 1/16" - 350,000 (°F x PSIG) 1/8" - 250,000 (°F x PSIG)
MAX TEMPERATURE	650°F CONTINUOUS 900°F MAXIMUM	DENSITY	105 lbs/ft <sup>3</sup>
MAX PRESSURE	2000 PSI	WEIGHT (SF, 1/8")	1.11 lbs

INDUSTRY CROSSOVER: 9850, C4500

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## **GRAPHITE GASKET MATERIALS**

Graphite Gasket Products are flat gasketing materials composed of pure, exfoliated flake material. These materials excel in extreme conditions, withstand high temperatures, high pressures, and aggressive chemicals, and are proven fire-safe. Graphite provides a reliable seal as it seals easily under moderate bolt load, offers

superior torque retention, retains dimensional stability in high temperatures and seals tightly even during pressure fluctuations. Flexible graphite is manufactured in such a manner that no organic or inorganic binders and fillers are introduced—the end product is essentially graphite with outstanding physical properties. The insertion of wire mesh, stainless steel foil, and tanged metal inserts increase strength and ease of handling

#### BENEFITS EXCELLENT RESISTANCE

- Pure exfoliated graphite flake material excels in extreme conditions, withstanding heat, pressure, and aggressive chemicals
- Proven fire-safe

RELIABLE SEAL

- Seals easily under moderate bolt load, offers superior torque retention
- Retains dimensional stability in high temperatures; seals tightly even during pressure fluctuations

### **HOMOGENEOUS GRAPHITE SHEET**

MIN TEMPERATURE	-400°F	MAX PRESSURE	1200 PSI
MAX TEMPERATURE	850°F	MAX P x T	1/16" - 700,000 (°F x PSIG) 1/8" - 350,000 (°F x PSIG)

INDUSTRY CROSSOVER: 3123, 3125, HL

## **316SS WIRE MESH INSERTED GRAPHITE SHEET**

MIN TEMPERATURE	-400°F	MAX PRESSURE	2000 PSI
MAX TEMPERATURE	850°F	MAX P x T	1/16" - 700,000 (°F x PSIG) 1/8" - 350,000 (°F x PSIG)

INDUSTRY CROSSOVER: 3124, 3126



### **316SS FOIL INSERTED GRAPHITE SHEET**

MIN TEMPERATURE	-400°F	MAX PRESSURE	2000 PSI
MAX TEMPERATURE	850°F	MAX P x T	1/16" - 700,000 (°F x PSIG) 1/8" - 350,000 (°F x PSIG)

**INDUSTRY CROSSOVER: 3125SS, SLS** 

### **316SS TANG INSERTED GRAPHITE SHEET**

MIN TEMPERATURE	-400°F	MAX PRESSURE	2000 PSI
MAX TEMPERATURE	850°F	MAX PxT	1/16" - 700,000 (°F x PSIG) 1/8" - 350,000 (°F x PSIG)

INDUSTRY CROSSOVER: 3125TC, PSM

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## **PTFE GASKET PRODUCTS**

PTFE Gasket Products are flat PTFE gasketing materials. These high-performance PTFE materials are manufactured using a process that imparts unique physical properties, which are not obtainable through conventional manufacturing methods.

Designed for severe chemical service, color-coded for easy identification, superior sealability, which helps reduce process and media loss as well as fugitive emissions, reduced creep and cold flow characteristics, and patented thermal bonding process to fabricate virtually any size gasket. The process reorients the PTFE and fillers in such a way to increase the material's tensile properties and decrease the creep relaxation problems that usually plague PTFE products. In addition, the mixing process creates a homogenous material with consistent, superior physical properties that, unlike inexpensive skived PTFE sheet materials, do not fluctuate from one side of the sheet to another.

#### **PTFE GASKET PRODUCTS**

- PTFE Gasketing with Aluminosilicate Microspheres
- NSF 61 Approved/Oxygen Service PTFE Gasketing with Aluminosilicate Microspheres
- PTFE Gasketing with Barium Sulfate Filler
- PTFE with Graphite Filler
- Microcellular PTFE Gasketing



### **PTFE GASKETING with ALUMINOSILICATE MICROSPHERES**

#### BENEFITS TIGHTER SEAL

- Improved performance over conventional PTFE
- · Reduced product loss and emissions

#### **REDUCED CREEP RELAXATION**

- Unique manufacturing process minimizes cold flow problems typical of skived and expanded PTFE sheets
- Excellent bolt torque retention

#### CHEMICAL RESISTANCE

 Withstands a wide range of chemicals for extended service life in a wide variety of applications

#### **COST SAVINGS**

 Cuts operational costs through reduced: Fluid loss, Energy consumption, Maintenance costs, Inventory costs, Waste

#### LARGEST SHEET SIZES

- · Offers some of the largest sheet sizes in the industry
- Improved material utilization reduces waste

#### **BRANDING AND COLOR CODING**

- · Easy identification of superior products
- · Reduces misapplication and use of unauthorized, inferior substitutes

#### **MEDIA** • Moderate concentrations of acids and some caustics

- Hydrocarbons
- Solvents
- Water
- Refrigerants
- Cryogenics, hydrogen peroxide (For oxygen service, specify "Style 3505 for oxygen service.")

MIN TEMPERATURE	-450°F	MAX PRESSURE	800 PSI
MAX TEMPERATURE	500°F	MAX P x T	1/16" - 350,000 (°F x PSIG) 1/8" - 250,000 (°F x PSIG)

#### INDUSTRY CROSSOVER: 3504, TC1003



## PTFE GASKET PRODUCTS continued

# NSF 61 APPROVED/OXYGEN SERVICE PTFE GASKETING with ALUMINOSILICATE MICROSPHERES

#### BENEFITS TIG

#### TIGHTER SEAL

- Improved performance over conventional PTFE
- Reduced product loss and emissions

#### REDUCED CREEP RELAXATION

- Unique manufacturing process minimizes cold flow problems typical of skived and expanded PTFE sheets
- Excellent bolt torque retention

#### CHEMICAL RESISTANCE

 Withstands a wide range of chemicals for extended service life in a wide variety of applications

#### COST SAVINGS

• Cuts operational costs through reduced: Fluid loss, Energy consumption, Maintenance costs, Inventory costs, Waste

#### LARGEST SHEET SIZES

- · Offers some of the largest sheet sizes in the industry
- Improved material utilization reduces waste

#### BRANDING AND COLOR CODING

- Easy identification of superior products
- Reduces misapplication and use of unauthorized, inferior substitutes

#### MEDIA • Potable drinking water

- Hydrocarbons
- Solvents
- Moderate concentrations of acids and some caustics
- Refrigerants
- Cryogenics, hydrogen peroxide

MIN TEMPERATURE	-450°F	MAX PRESSURE	800 PSI
MAX TEMPERATURE	500°F	MAX P x T	1/16" - 350,000 (°F x PSIG) 1/8" - 250,000 (°F x PSIG)

#### **INDUSTRY CROSSOVER: 3505**



### **PTFE GASKETING with BARIUM SULFATE FILLER**

#### BENEFITS TIGHTER SEAL

- Improved performance over conventional PTFE
- · Reduced product loss and emissions

#### REDUCED CREEP RELAXATION

- Unique manufacturing process minimizes cold flow problems typical of skived and expanded PTFE sheets
- Excellent bolt torque retention

#### CHEMICAL RESISTANCE

 Withstands a wide range of chemicals for extended service life in a wide variety of applications

#### **COST SAVINGS**

 Cuts operational costs through reduced: Fluid loss, Energy consumption, Maintenance costs, Inventory costs, Waste

#### LARGEST SHEET SIZES

- · Offers some of the largest sheet sizes in the industry
- Improved material utilization reduces waste

#### BRANDING AND COLOR CODING

- · Easy identification of superior products
- · Reduces misapplication and use of unauthorized, inferior substitutes

#### MEDIA • Strong caustics

- Moderate acids
- Chlorine
- Gases
- Water
- Steam
- Hydrocarbons
- Cryogenics and aluminum fluoride (For oxygen service, specify "Style 3503 for oxygen service.")

MIN TEMPERATURE	-450°F	MAX PRESSURE	1200 PSI
MAX TEMPERATURE	500°F	MAX P x T	1/16" - 350,000 (°F x PSIG) 1/8" - 250,000 (°F x PSIG)

#### INDUSTRY CROSSOVER: 3510, TC1005



## **PTFE with GRAPHITE FILLER**

#### BENEFITS TIGHTER SEAL

- · Graphite-filled PTFE offers extremely low void content for minimal emissions
- Delivers long service against volatile hazardous pollutants (VHAP and VOC)
- Withstands high concentrations of hydrofluoric acids and other glass-dissolving media

#### MEDIA

- Monomer serviceCryogenics
- Highly concentrated hydrofluoric acid
- Volatile hazardous air pollutants (VHAP)

MIN TEMPERATURE	-450°F	MAX PRESSURE	1200 PSI
MAX TEMPERATURE	500°F	MAX P x T	1/16" - 350,000 (°F x PSIG) 1/8" - 250,000 (°F x PSIG)

#### **INDUSTRY CROSSOVER: 3530**



## **MICROCELLULAR PTFE GASKETING**

#### BENEFITS TIGHTER SEAL

- Highly compressible PTFE seals under low bolt load- suitable for many non-metallic flanges\*
- Compressible material conforms to surface irregularities, especially on warped, pitted or scratched flanges
- Reduced cold flow and creep normally associated with conventional PTFE gaskets

#### EXCELLENT CHEMICAL COMPATIBILITY

• Pure PTFE withstands a wide range of chemicals

#### EASY TO CUT AND INSTALL

• Soft PTFE can be cut easily from larger sheets, reducing inventory costs and expensive downtime

#### MEDIA

- Strong causticsStrong acids
- Hydrocarbons
- Chlorine
- Cryogenics
- Glasslined equipment

\*For flat face flanges, a minimum compressive stress of 1,500psi is recommended on the contacted gasket area for 150psig liquid service. Consult with the flange manufacturer to confirm that adequate compressive stress is available.

MIN TEMPERATURE	-450°F	MAX PRESSURE	1200 PSI
MAX TEMPERATURE	500°F	MAX P x T	1/16" - 350,000 (°F x PSIG) 1/8" - 250,000 (°F x PSIG)

#### **INDUSTRY CROSSOVER: 3540**



PTFE (also known by the trade name Teflon ®) has a very high melting point, and is capable of continued service at 500F (260 C). PTFE products are used as gasket and packing materials in chemical processing equipment; as electrical insulation for maximum reliability; and in bearings, seals,

piston rings and other mechanical applications -especially those requiring anti-stick characteristics. PTFE has excellent thermal and electrical insulation properties, and it has a low coefficient of friction. PTFE is known for its non-stick properties. Materials may stick to it but can be peeled off or rubbed off. Available in virgin or mechanical grade.

COLOR	WHITE	TENSILE ELONGATION AT BREAK	300%
DUROMETER HARDNESS SHORE D	50	DENSITY	0.078 lbs/ft <sup>3</sup>
TENSILE STRENGTH	3900 PSI	COMPRESSIVE STRENGTH	3500 PSI
WATER ABSORPTION (24 HOURS)	0.05%	DIELECTRIC STRENGTH WEIGHT (1/8" PER SF)	285 v/mil 1.5 lbs

