

CHEMICALLY RESISTANT. UNIFORMLY STRONG. INHERENTLY CLEAN.

SIGMA® 600

TOTAL INTEGRITY FOR THE MOST DEMANDING APPLICATIONS

Closing the gap between yesterday's outdated gasket technology and today's cutting edge solutions is easy with the introduction of, SIGMA® 600, high performance sealing material. Flexitallic has mastered a proprietary manufacturing process

that produces biaxially-orientated R²PTFE gasket material. This unique restructuring process requires no filler materials and produces SIGMA 600 gasket material for the ultimate in chemical resistance.

SIGMA®

INNOVATIVE. VERSATILE. COMPLETE.

Flexitallic

Total Gasket Integrity

ONE SOLUTION



SIGMA 600 raises gasket material technology to a higher level. Designed to last longer in the most demanding applications, SIGMA 600 is proven to perform in mission critical operations.

Developed specifically for petrochemical and chemical facility applications that value true gasket integrity, SIGMA 600 possesses similar physical properties found in early SIGMA versions, but has lower creep and

cold flow, complies with the requirements of FDA regulations, non-contaminating, and provides enhanced compressibility for both low and high bolt loads.

Metallic and Non-metallic Applications

SIGMA 600 was designed to replace older conventional gasket technologies including skived PTFE, semi-restructured PTFE, and restructured PTFE (i.e., off white, fawn, and blue).

Its unique composition and uniform tensile strength make it a single gasket replacement material of choice for both metallic and non-metallic flange applications (i.e., glass lined, ceramic, plastic or metal).

Unparalleled Chemical Resiliency

SIGMA 600 consists of 100% pure PTFE material and is suitable for use with hydrogen fluoride. Its composite strength is also impervious to all sealing chemicals across the whole PH range (0-14) with the exception of molten alkali metals and fluorine gas.

SIGMA® 600

Service

SIGMA® 600

Max Temperature	C° (F°)	260 (500)
Max Pressure	bar (psig)	85 (1235)
pH Range	—	0-14

These temperature and pressure guides cannot necessarily be used simultaneously and may not apply to all thicknesses

Physical Properties

Color	—	White
Density	gcm ³ (lbs/ft ³)	0.76 (47.4)
ASTM Compressibility	%	68.0
ASTM Recovery	%	5.1
ASTM Tensile Strength	MPa (psi)	6.7 (972)
DIN Residual Stress @ 175°C	MPa (psi)	33.9 (4917)
DIN Gas Permeability	mL/min	0.01
ASTM Liquid Leakage	mL/hr	2.0

m & Y Values

ASME m	—	1.4
ASME Y	MPa (psi)	11.0 (1595)

Availability

Sheet Size	1.5 m x 1.5 m	60" x 60"
Thickness Range	0.75 mm to 6.35 mm	1/32" – 1/4"

All values are based on 1.5 mm (1/16") thick material unless otherwise stated.

Flexitallic

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Effectively manage your gasket selection process, simplify inventory requirements and receive proven long-term sealing with SIGMA® gasket material—The Innovation of Integrity.

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