

SILICONE SNS TAPES

Pressure-Sensitive Adhesive Tapes

Saint-Gobain® Norseal® Silicone SNS Tapes are manufactured by **Saint-Gobain** Performance Plastics Corporation, Tape Solutions business, and are intended to outperform all other elastomer tapes in service of life, weatherability, compression set resistance and electrical resistivity in extreme temperature applications. These pressure-sensitive silicone tapes are available in a variety of widths and thicknesses for use in gasketing, cushioning, thermal insulation and vibration dampening applications. Other uses include noise reduction, clamping of hot parts and electrolysis reduction between dissimilar metals.

Norseal Silicone SNS Rubber Tapes intend to provide all the benefits of silicone rubber in an easy-to-apply, pressure-sensitive tape form. They are available in standard stock widths or can be slit to order.

- 100S is a silicone sponge with a high temperature silicone adhesive.
- 200A is a silicone sponge with an aggressive acrylic adhesive.
- 300AR is a reinforced silicone sponge with an aggressive acrylic adhesive. Its unique construction intends to provide the compressibility of sponge and the dimensional stability of fiberglass reinforcement. Stretch is eliminated, which contributes to the consistent size and shape of cut parts and inhibits outward extrusion under high pressure. It further permits close tolerance slitting.
- 440S combines a 30 durometer solid rubber with a high temperature silicone adhesive.
- 440A combines a 30 durometer solid rubber with an acrylic adhesive. It intends to provide for high elongation and good conformability, and is an excellent gasketing material.
- 512AF and 512GF use F-12 lightweight flame-resistant foam with a modified cell structure along with a film-supported acrylic pressure-sensitive adhesive.
- 515GF offers our flame-retardant, lightweight modified cell F-15 Silicone Foam as the base material, along with a film-supported acrylic pressure-sensitive adhesive.
- 520AF and 520GF use F-20 closed cell flame-resistant foam along with a film-supported acrylic pressure-sensitive adhesive.
- SNS Tapes 100S, 200A, 512AF and 520AF meet FDA 21 CFR 177.2600.



APPLICATIONS

- Military
- Drones
- GPS
- Walkie talkies
- Environmental gasketing

Norseal Silicone SNS Tape – Properties

Performance tests are run using standard test procedures. The values presented are typical values and should not be used for specification purposes.

Property	ASTM Test Method	Sponge	Sponge	Reinforced Sponge	Solid	Solid	Foam	Foam	Foam	Foam	Foam
		100S	200A	300AR	440S	440A	512AF	520AF	512GF	515GF	520GF
Color	-	Orange-Tan	Orange-Tan	Blue	Gray	Gray	Gray	Gray	Light Gray	Charcoal Gray	Dark Gray
Adhesive*	-	Silicone	Acrylic	Acrylic	Silicone	Acrylic	PET Reinforced Acrylic	PET Reinforced Acrylic	PET Reinforced Acrylic	PET Reinforced Acrylic	PET Reinforced Acrylic
Adhesion to Steel	Oz./in. (gm/cm)	D1000	15 (168)	30 (335)	15 (168)	15 (168)	30 (335)	30 (335)	30 (335)	30 (335)	30 (335)
Compression Deflection†	psi (kPa)	D1056	10 (68.9)	10 (68.9)	15 (82.7)	45 (310)	45 (310)	3 (20.7)	8 (55.2)	3 (20.7)	6 (41.3)
Tensile Strength**	psi (MPa)	D412	90 (0.62)	90 (0.62)	125 (fabric break, lb/in) (22.3 kg/cm)	700 (4.82)	700 (4.82)	20 (film break, lb/in) (3.6 kg/cm)	20 (film break, lb/in) (3.6 kg/cm)	25 (film break, lb/in) (4.46 kg/cm)	25 (film break, lb/in) (4.46 kg/cm)
Elongation	%	D412	150	150	<10	650	650	75	75	75	75
Compression Set††	%	D1056	15	15	25	30	30	5	5	5	10
Density of Backing	lb/ft³ (kg/m³)	P3574	29 (470)	29 (470)	35 (554)	69 (1104)	69 (1104)	12 (192)	20 (320)	12 (192)	15 (240)
Silicone Rubber Substrate	-	R10470M	R10470M	R10450	Solid	Solid	F-12	F-20	F-12	F-15	F-20

*Adhesive shelf life when stored at 70°F (21°C) to 90°F (32°C) at less than 50% humidity; 6.0 months for silicone adhesive on sponge or solid backings, 24.0 months for acrylic adhesive on any SNS backing material. To maximize shelf life, store at 40°F (4.4°C) to 50°F (10°C).

†Compression Deflection - Compressed to 75% of original thickness. ††Compression Set - Compressed 50% for 22 hours at 212°F.

Temperature range for SNS tapes 100S and 440S with Silicone PSA is -100 to +500°F. Temperature range for SNS tapes 512AF and 520AF with Acrylic PSA is -30 to +220°F. Temperature range for SNS tapes 200A, 300AR and 440A with Acrylic PSA is -20°F to +325°F.

** Samples with supported adhesive are shown in force per width to the increased strength of the film support.

Thickness+++ in.	mm	100S	200A	300AR	440S	440A	512AF, 512GF, 515GF, 520AF, 520GF	Roll Length yards (m)
1/32 ± .010	(.79 ± .254)				■	■		20 (18.2)
1/16 ± 1/64	(1.59 ± .41)	■	■	■			■	10 (9.1)
3/32 ± 1/64	(2.38 ± .41)	■	■	**			**	10 (9.1)
1/8 ± 1/32	(3.18 ± .79)	■	■	■			■	10 (9.1)
3/16 ± 1/32	(4.76 ± .79)	■	■	■			■	5 (4.6)
1/4 + 3/64 - 1/32	(6.35 + 1.19 - .79)	**	**				■	5 (4.6)
3/8 ± 3/64	(9.52 ± 1.19)						**	5 (4.6)
1/2 ± 3/64	(12.7 ± 1.19)						**	5 (4.6)
Minimum widths, inches (mm)		1/2 (12.7)	1/2 (12.7)	1/4 (6.35)	1/2 (12.7)	1/2 (12.7)	1/2 (12.7)	

** Special order, minimum quantity.

+++Thickness tolerances for backing only.

Cell Size: **Norseal** Silicone Sponge products may show variation in cell size. This is not cause for rejection if **Saint-Gobain** finished product standards are met. SNS Dimensions: Upon removal of the liner, the potential exists for dimension changes as the sponge relaxes.

Important Instructions

- Because **Saint-Gobain** cannot anticipate or control every potential application, we strongly recommend testing of this product under individual application conditions prior to commercial use.
- Surfaces must be clean and free of oil, grease, moisture, dust and dirt. Isopropyl alcohol is good for cleaning the surface. Do not remove liner until tape is in proper position. Avoid touching adhesive surface before application.

IMPORTANT: It is the user’s responsibility to ensure the suitability and safety of Saint-Gobain products for all intended uses and that the materials to be used comply with all applicable regulatory requirements. Saint-Gobain assumes no responsibility for any product failures that occur due to your actions or inactions, including your use, design, fabrication or application of the products into which the materials are incorporated.

WARRANTY: This document should not be considered a warranty or a guarantee. The descriptions of the Product provided hereinabove may vary based on specifications requested and testing protocols. Typically, Saint-Gobain warrants that product(s) will meet mutually agreed specifications at delivery and Saint-Gobain honors any breach of warranty claims for six (6) months from delivery of the products. If a product is determined to be nonconforming with its warranty, Saint-Gobain’s sole obligation is, at its option, to either replace the nonconforming products or reimburse the purchase price for the same.

The only obligation under any applicable product warranty will be to replace any portion proving defective, or at our option, to refund the purchase price thereof. SAINT-GOBAIN DISCLAIMS ALL OTHER EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR USE.



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