

# Sur-Sil™ HTLS Silicone Foam

Sur-Sil™ HTLS Silicone foam is the go-to material for solving the toughest sealing challenges with die-cut gaskets. Sur-Sil™ HTLS Silicone is a closed cell foam that offers very low compression set at elevated temperatures. Designed for dust and moisture prevention under harsh environments and medium to high firmness for enhanced durability. Optional pressure sensitive adhesive backings are also available.

Properties	Units	Method	HTLS-3	HTLS-4	HTLS-5
Relative Firmness	Shore OO	ASTM D2240	Medium	Medium-High	High
Color*	---	Visual	Gray	Gray	Gray
Thickness Range**	in	---	0.031 to 0.5	0.031 to 0.5	0.031 to 0.5
Density	lb/ft	ASTM D1056	22	29	35
Compression Set	%	50% Defl. @ 70C for 22hrs 50% Defl. @ 100C for 22hrs	<1% <2%	<1% <2%	<1% <2%
Compression Force	PSI	ASTM D1056 (@ 25% Def.)	8	12	17
Temp. Range	°C	---	-50 to 230	-50 to 230	-50 to 230
Dielectric Strength	kV/mm	ASTM D149	6	5.5	5
Ultimate Elongation	%	ASTM D412	80	70	70
Volume Resistivity	Ω*cm	ASTM D257	1x 10+15	1 x 10+15	1 x 10+15
Flame Rating	---	UL 94	V-0	V-0	V-0
Silicone Volatiles	%	ASTM F2466	<0.20	<0.20	<0.20

\*Sur-Sil HTLS-5 is currently only UL compliant



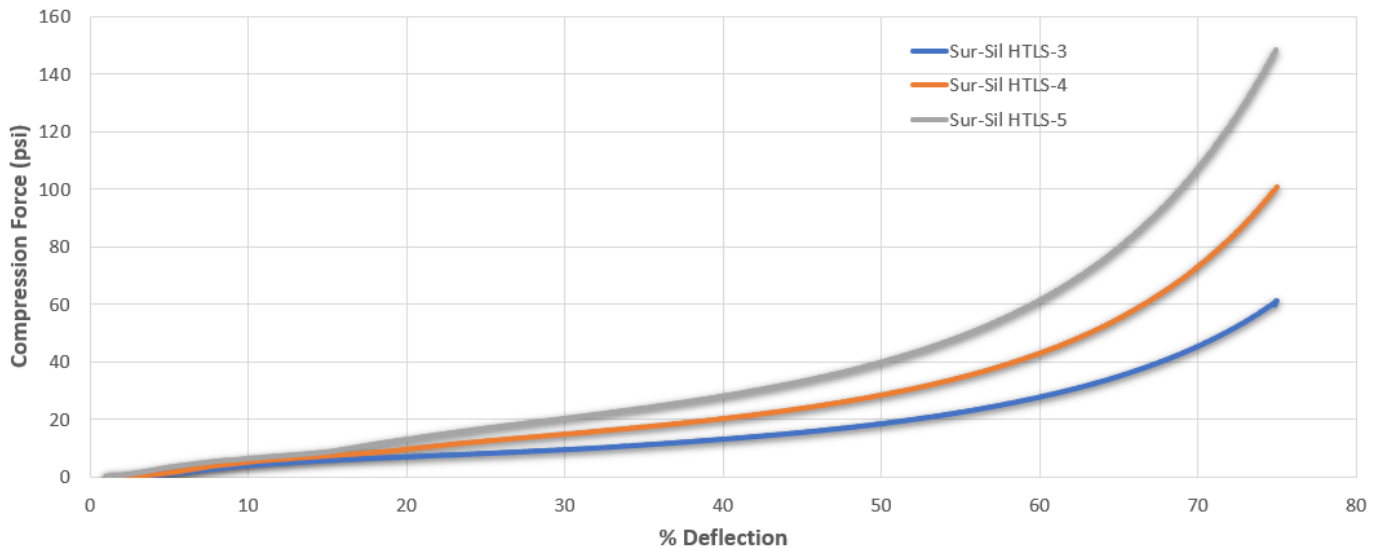
**Sur-Seal**  
www.sur-seal.com

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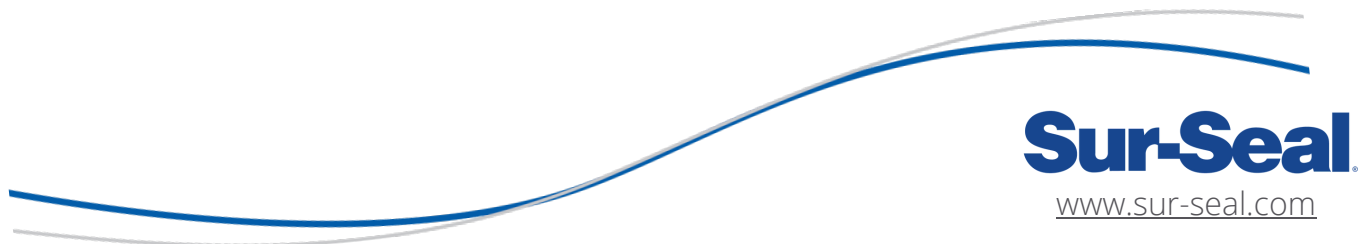
Sur-Sil™ HTLS Silicone foam is provided at various thicknesses in three different grades each with a distinct firmness to meet a wide variety of applications. Sur-Seal has the capability of measuring compression force as well as open and close cycle performance to help with real world applications.

Compression Force vs. Deflection %



\*Data based on ASTM D575 0.25" thick sample

		Deflection %														
Sur-Sil		10	15	20	25	30	35	40	45	50	55	60	65	70	75	
Compression Force (psi)	HTLS-3	3.8	5.6	6.8	8.1	9.4	11.0	13.0	15.4	18.4	22.4	27.7	34.9	45.2	61.2	
	HTLS-4	5.0	7.2	9.5	12.3	14.7	17.2	20.1	23.7	28.3	34.4	42.7	55.0	72.8	100.5	
	HTLS-5	6.5	8.8	13.1	17.0	20.4	24.0	28.2	33.2	39.8	48.8	61.2	79.2	106.9	148.2	



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