

Engineering Note

SUBJECT: CICOIL FLEXX-SIL™ RUBBER COMPOSITION & ELECTRICAL PROPERTIES

The description and composition of CICOIL Flexx-Sil™ rubber is as follows:

Generic Description: Ultra-Pure Synthetic Rubber
 Physical Form: Flexible yet durable
 Color: Translucent clear
 Odor: None
 NFPA Profile: Health 0 Flammability 1 Instability/Reactivity

COMPOSITION/INFORMATION ON INGREDIENTS*

PHYSICAL AND CHEMICAL PROPERTIES

Physical and mechanical, per A-A-59588 & ZZ-R-765E

Property	Unit	Test Method	Value
Temperature Range	°C	ASTM D2137 & UL 94HB	-65 to 260
Hardness	Shore A	ASTEM D2240	68-70
Water Absorption	% vol. change	ASTM D471	<+5
Tensile Strength	PSI	ASTM D412	>800
Elongation at Break	%	ASTM D412	>400
Tear Strength	lb/in	ASTM D624	280
Brittle Point	°C	ASTM 2137	-70
Flame Retardant Temp.	°C	UL94HB & IEC 332	260 min
Decomposition Temp.	°C	PTL 13057	446.2
Combustion Temp.	°C	PTL 13057	710.3

TYPICAL ELECTRICAL PROPERTIES

Property [†]	Typical Value for Flexx-Sil™ Rubber
Dielectric strength, volts/mil	450
Dielectric constant	2.9 to 3.6
Dissipation factor	5x10 ⁻⁴ to 200x10 ⁻⁴
Volume resistivity, ohm-cm	8x10 ¹³ to 200x10 ¹³
Insulation resistance, ohms	1x10 ¹² to 10x10 ¹²

[†] All tests conducted in accordance with ASTM test methods.

CHEMICAL RESISTANCE

[https://www.cicoil.com/images/pdf/technical-support/Chemical Compatibility for Flexx-Sil.pdf](https://www.cicoil.com/images/pdf/technical-support/Chemical%20Compatibility%20for%20Flexx-Sil.pdf)

Please contact CICOIL for more information.



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* 100% cured
 Contact factory for flight line fluid compatibility information