Varglas Silicone Resin 500 Sleeving Typical Properties

Property	Procedure	Performance
Physical		
Tensile Strength, Coating	ASTM-D412	200 psi
Ultimate Elongation, Coating	ASTM-D412	100% @ 20°C
Hardness, Coating	ASTM-D2240	60 (Durometer)
Flexibility and Toughness, Coating	UL 1441	Passes (Penetration Test)
Chemical		
Oil and Solvent Resistance	MIL-I-3190/5	Good
Water Vapor Resistance	MIL-I-3190/5	Excellent
Resistance to Acids and Alkalies	—	Excellent in weak solutions. Fair in concentrated solutions.
Resistance to the Elements	—	Good sunlight and weathering properties.
Compatibility	UL 1446	Good. Compatible with most potting compounds and varnishes.
Electrical		
Dielectric Strength after 48/23/50:		
Grade A	NEMA TF - 1	8000v min. avg., 6000v min. indiv.
Grade B	NEMA TF - 1	4000v min. avg., 2500v min. indiv.
Grade C - 1	NEMA TF - 1	2500v min. avg., 1500v min. indiv.
Grade C - 2	NEMA TF - 1	1500v min. avg., 800v min. indiv.
Grade C - 3	NEMA TF - 1	No voltage guarantee.
Dielectric Strength after 96/23/96:		
Grade A	NEMA TF - 1	80% of Original Value.
Hydrolytic Stability after 336 hrs. @ 70°C over Constant Water Reflux	MIL-I-3190/5	5000 volts min. avg.
Thermal		
Thermal Endurance	MIL-I-3190/5 & UL 1441	Class 200°C (H)
Brittleness Temperature	ASTM-D350	- 56°C
Flame Resistance	ASTM-D350, Method B	Passes
	NEMA TF-1	Passes
	MIL-I-3190/5, Method B	Passes
	UL 1441	Passes (VW-1), Grade C3 only.

Note:

Information contained here is precise and reliable. However, being unique, each end-use should be evaluated to satisfy its specific requirements.

Varflex
Electrical Insulating Sleeving

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Varglas Silicone Rubber Sleeving

Silicone Rubber Coated Fiberglass Sleeving

Class 200 (-73°C to +200°C) (-100°F to +392°F)

Description

Varglas Silicone Rubber Sleeving is produced by coating braided fiberglass with a high-performance silicone rubber that is extremely flexible and exhibits unusual toughness and abrasion resistance. In addition to having a Class 200°C rating, its brittle point of -73°C also suggests its use in a wide range of applications requiring resistance to temperature extremes.

Specifications

Varglas Silicone Rubber Sleeving conforms to, and is listed on the Qualified Products List (QPL) for, MIL-I-3190/6, latest revision (Grade A); NEMA TF-1, Type 5; and ASTM-D372.

Under the Component Program of Underwriters Laboratories, Grade A Varglas Silicone Rubber is recognized for 200°C, 600 volt service and complies with VW-1 flammability requirements under UL File #E63450. (VW-1 compliance of Grades B through C-3 is covered under UL File #E53690.) CSA International certifies the use of Grade A for 200°C, 600 volt service and flammability requirements under CSA File #LR58486 VW-1/FT1. Varglas Silicone Rubber is incorporated in systems work, per UL Safely Standard 1446, to facilitate product acceptance by UL.

Applications

Varglas Silicone Rubber Sleeving is used in appliances, motors and generators as well as in automotive, marine and aircraft electrical and electronic components such as transformers, coils, relays, etc. where a 200°C thermal rating is required. In addition to being well-suited as heavy duty insulation where subjected to high heat, such as in die-casting and plastic molding, Varglas Silicone Rubber Sleeving is also suitable for use in extremely low-temperature environments such as high altitude and aerospace applications.

Sizes

AWG #24 through 2" I.D. Other sizes subject to inquiry

Standard Color

Natural and white. Other colors made to order.

Standard Packaging

Coils, spools or 36" lengths at manufacturer's option, unless otherwise specified. There is no cutting charge for 36" lengths, but lengths other than 36" are subject to cutting charges. Sizes over 1" I.D. are generally supplied in 36" lengths.

Varglas Silicone Rubber Typical Properties

Property	Procedure	Performance
Physical		
Tensile Strength, Coating	ASTM-D412	1500 psi
Ultimate Elongation, Coating	ASTM-D412	800% @ 20°C
Hardness, Coating	ASTM-D2240	50 (Durometer)
Flexibility and Toughness, Coating	UL 1441	Passes (Penetration Test)
Chemical		
Oil and Solvent Resistance	MIL-I-3190/6	Passes (Excellent)
Water Vapor Resistance	MIL-I-3190/6	Passes (Good)
Resistance to Acids and Alkalies	—	Excellent
Resistance to the Elements	—	Unaffected by sunlight and weather.
Compatibility	UL 1446	Good. Compatible with most potting compounds and varnishes.
Electrical		
Dielectric Strength after 48/23/50:		
Grade A	NEMA TF - 1	8000v min. avg., 6000v min. indiv.
Grade B	NEMA TF - 1	4000v min. avg., 2500v min. indiv.
Grade C - 1	NEMA TF - 1	2500v min. avg., 1500v min. indiv.
Grade C - 2	NEMA TF - 1	1500v min. avg., 800v min. indiv.
Grade C - 3	NEMA TF - 1	No voltage guarantee.
Dielectric Strength after 96/23/96:		
Grade A	NEMA TF - 1	80% of Original Value.
Hydrolytic Stability after 336 hrs. @ 70°C over Constant Water Reflux	MIL-I-3190/6	5000 volts min. avg.
Thermal		
Thermal Endurance	MIL-I-3190/6 & UL 1441	Class 200°C (H)
Brittleness Temperature	ASTM-D350	- 73°C
Flame Resistance	UL 1441	Passes (VW-1)
	ASTM-D350, Method B	Passes
	NEMA TF-1	Passes
	MIL-I-3190/6, Method B	Passes
Pushback	MIL-I-3190/6	No cracks or ruptures. 6000 volts min. avg. breakdown strength.

Note:

Information contained here is precise and reliable. However, being unique, each end-use should be evaluated to satisfy its specific requirements.

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