



S2(n) Halogen Free Thin Wall Cross-linked Polyolefin for General Purpose

Features

- Insulation, Protection, Identification
- Flame retardant
- Halogen free, Flexible
- Wide range of colors
- Operating temperature: -40~125°C
- Shrink temperature: 125°C
- Shrink Ratio: 2:1 & 3:1
- Voltage Class: 600~1000 V

Approvals

- UL approval
- File No.

Technical Data

	Property	Test Method	Values
Physical	Density	---	1.25 - 1.35
	Thermal endurance	---	125°C
	Tensile strength	When test at 500mm/min.	≥10.4 MPa
Aging (158 °C/168hrs)	Breakdown elongation	When test at 500mm/min.	≥ 200%
	Tensile strength	When test at 500mm/min.	≥ 7.3 MPa
	Breakdown elongation	When test at 500mm/min.	≥ 100%
	Heat shock	4hrs. at 250°C	No cracking, drop or flow
	Cold bend	1 hour at -30°C	No cracking
Electrical	Water absorption 24h at 23°C	---	≤0.5%
	Halogen free	IEC 61249-2-21	Cl:900ppm max. Br:900ppm max. Total (Cl + Br): 1500ppm max.
	Dielectric breakdown voltage	---	≥ AC 2500V
	Dielectric voltage withstand	1min.AC2500V	No breakdown
	Dielectric breakdown voltage	---	AC 2500V min. and more than 50% of the value obtained with unaged sample
Aging (158 °C/168hrs)	Dielectric voltage withstand	1min.AC2500V	No breakdown
	Volume resistivity	---	≥10 ¹² Ω.cm
	Copper stability	168hrs at 158°C 500mm/min.	Elongation>100%
Chemical	Flammability	UL224	All tubing test Pass

Note: The test methods conform to UL224.

Dimensions

Reference UPM S2(n)	As supplied ID min.	After recovered(mm) ID max.	WT nom.	Standard length m
1.5/0.5	1.5	0.5	0.5	200
3.0/1.0	3.0	1.0	0.7	200
4.5/1.5	4.5	1.5	0.7	100
6/2	6.0	2.0	0.8	100
9/3	9.0	3.0	1.0	50
12/4	12.0	4.0	1.1	50
15/5	15.0	5.0	1.2	50
18/6	18.0	6.0	1.3	50
24/8	24.0	8.0	1.5	25
30/10	30.0	10.0	1.7	25
39/13	39.0	13.0	1.9	25
50/16	50.0	16.0	2.5	1
60/20	60.0	20.0	2.6	1
70/23	70.0	23.0	2.6	1
80/26	80.0	26.0	2.8	1
90/30	90.0	30.0	2.8	1
100/33	100.0	33.0	3.0	1

Shrink ratio 3:1

Dimensions

Shrink ratio 2:1

Reference UPM S2(n)	As supplied ID (mm)	After recovered(mm) ID max.	WT	Standard length m/spool	Reference UPM S2(n)	As supplied ID (mm)	After recovered(mm) ID max.	WT	Standard length m/spool
0.6	0.9±0.2	0.4	0.33±0.10	200	15.0	15.5±0.4	7.5	0.70±0.10	100
0.8	1.1±0.2	0.5	0.33±0.10	200	16.0	16.5±0.4	8.0	0.70±0.10	100
1.0	1.5±0.2	0.7	0.36±0.10	200	17.0	17.5±0.4	8.5	0.70±0.10	100
1.5	2.0±0.2	0.9	0.45±0.10	200	18.0	19.0±0.5	9.0	0.70±0.10	100
2.0	2.5±0.2	1.0	0.45±0.10	200	20.0	22.0±0.5	10.0	0.80±0.15	100
2.5	3.0±0.2	1.3	0.45±0.10	200	22.0	24.0±0.5	11.0	0.80±0.15	100
3.0	3.5±0.2	1.5	0.45±0.10	200	25.0	26.0±0.5	12.5	0.90±0.15	50
3.5	4.0±0.2	1.8	0.45±0.10	200	28.0	29.0±0.5	14.0	0.90±0.15	50
4.0	4.5±0.2	2.0	0.45±0.10	200	30.0	31.5±1.0	15.0	1.00±0.15	50
4.5	5.0±0.2	2.3	0.45±0.10	100	35.0	36.5±1.0	17.5	1.00±0.15	50
5.0	5.5±0.2	2.5	0.56±0.10	100	40.0	41.5±1.0	20.0	1.00±0.15	50
5.5	6.0±0.2	2.8	0.56±0.10	100	45.0	≥45	22.5	1.10±0.15	25
6.0	6.5±0.2	3.0	0.56±0.10	100	50.0	≥50	25.0	1.10±0.15	25
7.0	7.5±0.3	3.5	0.56±0.10	100	60.0	≥60	31.0	1.20±0.20	25
8.0	8.5±0.3	4.0	0.56±0.10	100	70.0	≥70	36.0	1.20±0.20	25
9.0	9.5±0.3	4.5	0.56±0.10	100	80.0	≥80	41.0	1.30±0.20	25
10.0	10.5±0.3	5.0	0.56±0.10	100	90.0	≥90	46.0	1.30±0.20	25
11.0	11.5±0.3	5.5	0.56±0.10	100	100.0	≥100	51.0	1.30±0.20	25
12.0	12.5±0.3	6.0	0.56±0.10	100	120.0	≥120	61.0	1.30±0.20	25
13.0	13.5±0.3	6.5	0.70±0.10	100	150.0	≥150	76.0	1.30±0.20	25
14.0	14.5±0.3	7.0	0.70±0.10	100	180.0	≥180	91.0	1.30±0.20	25

● ID=Internal Diameter

● WT= Wall Thickness

Typical application

- Ideal for electrical insulation, strain relief, wire bonding and light harness jacketing
- Common applications include electronic systems of subway, aircraft, submarine, control room facilities and sealed environment

Ordering

- Standard color : Red, Blue, Yellow, Green, Black, Clear
- Special colors are available on request
- Spools as standard, cutting pieces or assorted kits available on request
- Please specify specification, color, quantity when ordering

Cross reference

- Raychem/Tyco : Versafit V2 / RNF-100



http://www.Union-Polymer.com
Phone: (513) 899 1618
Email: info@Union-Polymer.com