

## FLEXIBLE CHLORINATED POLYOLEFIN 2 : 1 Shrink Ratio

### MILITARY SPECIFICATION



RoHS Compliant

### TYPICAL FEATURES

- |  |   |
|--|---|
| <p>1) SUMITUBE R10 is a rubber-like, flame retarded chlorinated polyolefin heat-shrinkable tubing which meets or exceeds all the requirements of Military Specifications AMS-DTL-23053/1C Classes 1 and 2.</p> <p>2) Shrink temperature is 130° C.</p> | <p>3) Operating temperature range is -75° C to +120° C and up to 200° C for short durations.</p> <p>4) SUMITUBE R10 is recommended for general purpose applications which require excellent abrasion and chemical resistance, such as diesel fuel environments. R10 has excellent properties at low temperatures.</p> |
|--|---|

### STANDARD SIZES

SIZE	INSIDE DIAMETER AS SUPPLIED (MIN)		INSIDE DIAMETER AFTER RECOVERY (MAX)		WALL THICKNESS AFTER RECOVERY (NOM)	
	INCH	(MM)	INCH	(MM)	INCH	(MM)
1/8*	.125	3.2	.062	1.6	.027	0.70
3/16*	.187	4.8	.093	2.4	.033	0.84
1/4	.250	6.4	.143	3.6	.035	0.90
3/8	.375	9.5	.211	5.4	.040	1.00
1/2	.500	12.7	.286	7.3	.048	1.20
5/8	.625	15.9	.357	9.1	.051	1.30
3/4	.750	19.1	.428	10.9	.057	1.40
7/8	.875	22.2	.500	12.7	.065	1.65
1	1.000	25.4	.570	14.5	.070	1.80
1 1/4	1.250	31.8	.714	18.1	.087	2.20
1 1/2	1.500	38.1	.857	21.8	.095	2.41
1 3/4	1.750	44.5	1.000	25.4	.107	2.71
2	2.000	50.8	1.140	29.0	.110	2.79
3	3.000	76.2	1.710	43.4	.125	3.17
4	4.000	101.6	2.280	57.9	.140	3.55

<b>Standard Colors:</b>	Black			
<b>Standard Package:</b>	Spooled (S)			
<b>How to Order:</b>	(Type of material)	(Size)	(Color)	(Packaging)
<b>Example:</b>	R10	1/4	Black	S

\* Non MIL-Spec sizes (cannot cert to MIL spec)

# R10 Specification Values

PROPERTY (UNITS)	TEST METHOD	REQUIREMENT
<b>Physical:</b> Tensile strength (psi) Elongation (%) Specific gravity Low temperature flex (-75° C) Heat shock (200° C, 4 hrs) Heat resistance (150° C, 168 hrs.) Elongation (%) Tensile stress (psi) (@200% elongation) Longitudinal change (%)	ASTM D 638 ASTM D 638 ASTM D 792 AMS-DTL-23053 AMS-DTL-23053  ASTM D 638 ASTM D 412  AMS-DTL-23053	1500 min. 250 min. 1.3 max. no cracking no cracking  200 min. 2500 max.  +1, -10
<b>Electrical:</b> Dielectric strength (volts/mil) Volume resistivity (ohm-cm)	ASTM D 876 ASTM D 876	300 min. 1.0 X 10 <sup>11</sup> min.
<b>Chemical:</b> Corrosion (150° C, 16 hrs.) Water absorption (%) Fluid resistance (23° C, 24 hrs.) Tensile strength Flammability Shrink temperature, nominal	AMS-DTL-23053 ASTM D570  AMS-DTL-23053 AMS-DTL-23053	no corrosion 1.0 max.  1000 min. pass 130° C

**Specification references:** AMS-DTL-23053/1C, Class 1 and Class 2



915 Armorlite Drive  
 San Marcos, CA 92069

Telephone: (800) 758-3515  
 FAX: (800) 758-3517

Rev. 10/27/08