

**Basic Properties**

- (1) Materials : Outer: Irradiated cross-linked flexible flame-retardant polyolefin  
Inner: Meltable adhesive
- (2) Shrink temperature : min. 110°C
- (3) Shrink Ratio : Radial change: min. 50%  
Longitudinal change: min. -15%
- (4) Continuous Operating Temperature : -55 to 125°C

**Features**

- (1) SAE-AMS/UL/CSA approved
- (2) Effective for fixing and waterproofing of pipe shape object
- (3) Flame-retardant
- (4) Flexible
- (5) Thinner adhesive (than Sumitube™ W3F2)

**Specification/Approvals**

SAE-AMS-DTL-23053/4 CLASS 2 (not for all the sizes)

UL224

File No. E75077  
Catalog No. Sumitube™ O2B2 or 890  
Rating temperature: 125°C  
Rating voltage: 600V

CSA C22.2 No. 198.1

File No. LR33298  
Rating temperature: 125°C  
Rating voltage: 600V

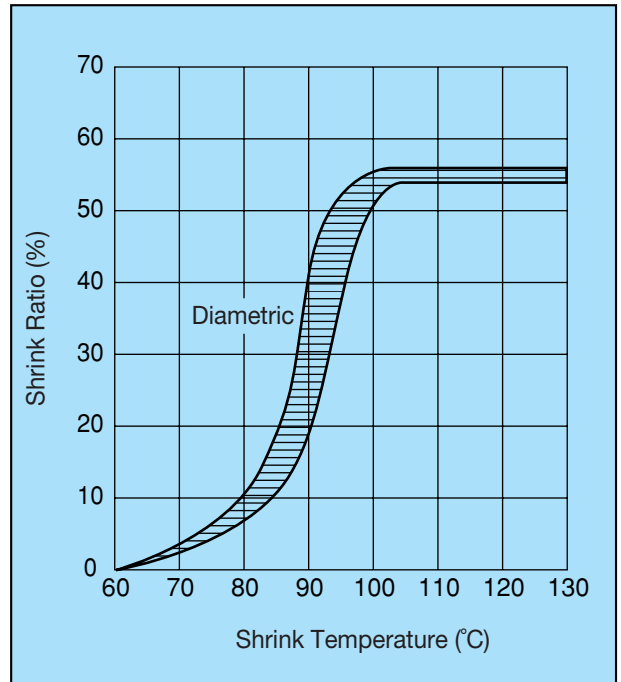
**Application**

- (1) Anticorrosion for pipes
- (2) Waterproof sealing for electronic devices
- (3) Insulation and protection for wire joints

**Colours**

Black, Brown, Red, Orange, Yellow, Green, Blue, Purple, Grey, White

**Shrink Property**



## Properties [UL224]

Properties	Items	Requirements	Typical values*1
Mechanical	Tensile strength (before aging)*2	min. 10.4MPa	16.4MPa
	Tensile strength (after aging)*2	158°C x 7 days, min. 7.3MPa	10.5MPa
	Elongation (before aging)	min. 200%	500%
	Elongation (after aging)	158°C x 7 days, min. 100%	305%
	Heat shock	250°C x 4 hours, no crack	pass
	Cold bend	-30°C x 1 hour, no crack	pass
Electrical	Voltage resistance (before aging)	AC2.5kV x 60 sec., no breakdown	pass
	Voltage resistance (after aging)	158°C x 7 days, AC2.5kV x 60 sec., no breakdown	pass
	Dielectric strength (before aging)	min. AC2.5kV	37.5kV
	Dielectric strength (after aging)	158°C x 7 days, min. 50% of original and min. AC2.5kV	pass
	Volume resistivity	min. $1.0 \times 10^{14} \Omega \cdot \text{cm}$	$2.3 \times 10^{14} \Omega \cdot \text{cm}$
Chemical	Corrosion against bare copper	158°C x 7 days, no corrosion after leaving under humidity 95%, 23°C x 24 hours	pass
	Flammability	Flame-retardant, pass ALL TUBING FLAME TEST	pass

\*1: For reference use only

\*2: Calculated by using outer cross section

## Sizes

Nominal size (inch)	Supplied ID (mm)		Recovered ID (mm)			Unit length (min.) (m)
	Inside diameter (min.)	Wall thickness (nom.)*1	Inside diameter (max.)	Wall thickness (nom)*1	Adhesive thickness (nom.)	
1/8	3.20	0.40	1.60	0.70	0.20	1.22
3/16	4.80	0.40	2.40	0.70	0.20	1.22
1/4 *2	6.4	0.40	3.20	0.75	0.20	1.22
3/8 *2	9.5	0.40	4.80	0.75	0.20	1.22
1/2 *2	12.7	0.40	6.4	0.75	0.20	1.22
3/4	19.1	0.50	9.5	0.90	0.20	1.22
1 *2	25.4	0.55	12.7	1.10	0.20	1.22

\*1: Including inner adhesive

\*2: SAE-AMS-DTL-23053 approved