

SUMITUBE™ B2

[Flexible flame-retarded heat-shrinkable tubing]
SAE-AMS/UL/CSA recognized

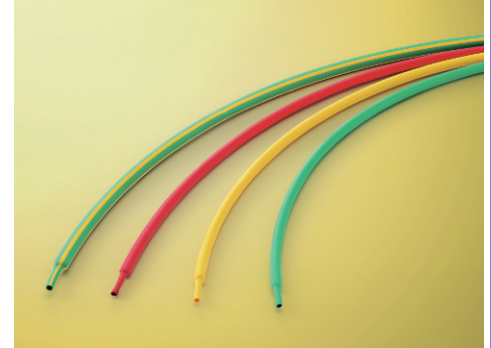
Catalog No. 826 ✓ RoHS directive

Waterproofing

Flame-retarded

UL recognized

CSA recognized



Basic Properties

- Material : Irradiated cross-linked flexible flame-retarded polyolefin
- Shrink temperature : min. 90°C
- Shrink ratio : Radial change: min. 50%
Longitudinal change: 0 ± 5%
- Continuous operating temperature : -55 to 135°C

Features

- SAE-AMS/UL/CSA recognized
- Flame-retarded (PBDE/PBB-free)
- Flexible ■ Bright colors

Specifications/Approvals

SAE-AMS-DTL-23053/5 Class 1

UL224 File No. E48762 Catalog No. SUMITUBE™ B2 or 826

Rating temperature: 125°C Rating voltage: 600V Flammability: VW-1

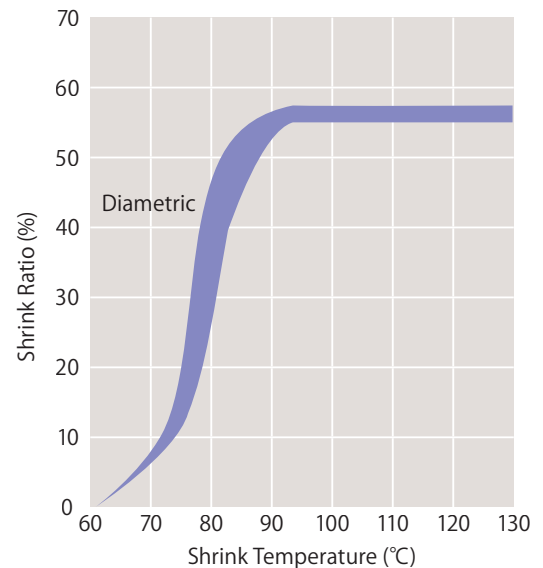
CSA C22.2 No. 198.1 File No. LR33298

Rating temperature: 125°C Rating voltage: 600V Flammability: VW-1

Applications

- Insulation, protection and reinforcement for termination and joints of electric wire
- Color identification and bundling for electric wires
- Insulation and protection of resistors and capacitors

Shrink Properties



Colors

- Black, Brown, Red, Orange, Yellow, Green, Blue, Purple, Gray, White
- Note: Yellow/Green striped color is available only for limited sizes

Properties [based on SAE-AMS-DTL-23053/5 Class 1]

Properties	Items	Requirements	Typical values*1
Mechanical	Tensile strength (before aging)	min. 10.4MPa	13.4MPa
	Elongation (before aging)	min. 200%	410%
	Elongation (after aging)	175°C x 7 days, min. 100%	410%
	Low temperature flexibility	-55°C x 4 hours, no crack	Pass
	Heat shock	250°C x 4 hours, no crack	Pass
Electrical	Specific gravity	max. 1.35	1.32
	Dielectric strength	min. 19.7kV/mm	37.1kV/mm
	Volume resistivity	min. $1.0 \times 10^{14} \Omega \cdot \text{cm}$	$3.1 \times 10^{15} \Omega \cdot \text{cm}$
Chemical	Water absorption	23°C x 24 hours, max. 0.50%	0.28%
	Corrosion against bare copper	175°C x 16 hours, no corrosion	Pass
	Color stability	175°C x 24 hours, no change	Pass
	Fluid resistance	After immersion at 24°C x 24 hours,	
	Tensile strength	min. 6.9MPa	13.1MPa
	Dielectric strength	min. 15.8kV/mm	30.5kV/mm
	Flammability	Flame-retarded, pass VW-1	Pass

*1: For reference use only

Sizes

Nominal size (inch)	Supplied ID (mm)		Recovered ID (mm)		Unit length (min.) (m)	
	Inside diameter	Wall thickness (nom.)	Inside diameter (max.)	Wall thickness	Cut	Spool
3/64	1.60 ± 0.30	0.20	0.60	0.41 ± 0.07	1.22	305
1/16	2.00 ± 0.30	0.20	0.80	0.43 ± 0.07	1.22	305
3/32	2.70 ± 0.30	0.25	1.20	0.51 ± 0.07	1.22	152.5
1/8	3.50 ± 0.30	0.25	1.60	0.51 ± 0.07	1.22	152.5
3/16	5.20 ± 0.30	0.30	2.40	0.51 ± 0.07	1.22	61
1/4	6.8 ± 0.4	0.30	3.20	0.64 ± 0.07	1.22	61
3/8	10.0 ± 0.4	0.30	4.80	0.64 ± 0.07	1.22	61
1/2	13.2 ± 0.5	0.30	6.4	0.64 ± 0.07	1.22	61
3/4	20.0 ± 0.6	0.40	9.5	0.76 ± 0.07	1.22	61
1	26.6 ± 0.8	0.45	12.7	0.89 ± 0.12	1.22	61
1-1/2	39.3 ± 1.0	0.45	19.1	1.02 ± 0.15	1.22	61
2	52.7 ± 1.5	0.50	25.4	1.14 ± 0.17	1.22	61
3	77.7 ± 1.5	0.55	38.1	1.27 ± 0.20	1.22	61
4	106.0 ± 3.0	0.60	50.8	1.40 ± 0.22	1.22	30.5

IRRAX™TUBE
IRRAX™TAPE

A
B
F2
F2 (UL)
V2
IRRAXTUBE RP3
B8
ER2
NHR
NHR4
FE2
IRRAXTAPE VZL

IRRAX™SLEEVE

SCM2
SBI 300/350
SCD
SNHM

Composite articles

SUMISEAL
SA3 CAP

Processing equipment

SUMISHRINKER / HEATING GUN

SUMITUBE™ B2 (3X)

[High shrink ratio flame-retarded heat-shrinkable tubing] UL/CSA recognized

Catalog No. 826 ✓ RoHS directive

Waterproofing Flame-retarded UL recognized CSA recognized



Basic Properties

- Material : Irradiated cross-linked flexible flame-retarded polyolefin
- Shrink temperature : min. 90°C
- Shrink ratio : Radial change: min. 66%
Longitudinal change: min. -15%
- Continuous operating temperature : -55 to 135°C

Features

- High shrink ratio
- UL/CSA recognized
- Flame-retarded (PBDE/PBB-free)
- Bright colors

Specifications/Approvals

UL224

File No. E48762 Catalog No. SUMITUBE™ B2 or 826
Rating temperature: 125°C Rating voltage: 600V
Flammability: VW-1

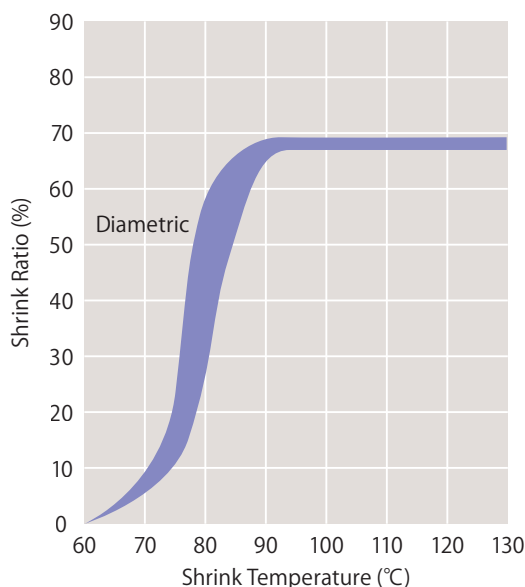
CSA C22.2 No. 198.1

File No. LR33298 Rating temperature: 125°C
Rating voltage: 600V Flammability: VW-1

Applications

- Insulation, protection and reinforcement of irregular-shaped substrates
- Color identification and bundling for electric wires

Shrink Properties



Colors

- Black, Brown, Red, Orange, Yellow, Green, Blue, Purple, Gray, White

Properties [UL224]

Properties	Items	Requirements	Typical values*1
Mechanical	Tensile strength (before aging)	min. 10.4MPa	12.1MPa
	Tensile strength (after aging)	158°C x 7 days, min. 7.3MPa	12.5MPa
	Elongation (before aging)	min. 200%	440%
	Elongation (after aging)	158°C x 7 days, min. 100%	450%
	Heat shock	250°C x 4 hours, no crack	Pass
	Cold bend	-30°C x 1 hour, no crack	Pass
Electrical	Dielectric withstand (before aging)	AC2.5kV x 60 sec., no breakdown	Pass
	Dielectric withstand (after aging)	158°C x 7 days, AC2.5kV x 60 sec., no breakdown	Pass
	Dielectric breakdown (before aging)	min. AC2.5kV	24.8kV
	Dielectric breakdown (after aging)	158°C x 7 days, min. 50% of original and min. AC2.5kV	Pass
	Volume resistivity	min. $1.0 \times 10^{14} \Omega \cdot \text{cm}$	$5.8 \times 10^{14} \Omega \cdot \text{cm}$
Chemical	Corrosion against bare copper	158°C x 7 days, no corrosion after leaving under 95% humidity, 23°C x 24 hours	Pass
	Stability against copper	158°C x 7 days, elongation min. 100% after leaving under 95% humidity, 23°C x 24 hours	405%
	Flammability	Flame-retarded, pass VW-1	Pass

*1: For reference use only

Sizes

Nominal size (mm)	Supplied ID (mm)		Recovered ID (mm)		Unit length (min.) (m)
	Inside diameter (min.)	Wall thickness (nom.)	Inside diameter (max.)	Wall thickness (min.)	
1.5/0.5	1.50	0.20	0.50	0.50	305
3/1	3.00	0.25	1.00	0.60	152.5
6/2	6.0	0.25	2.00	0.70	61
9/3	9.0	0.30	3.00	0.80	61
12/4	12.0	0.30	4.00	0.85	61
18/6	18.0	0.35	6.0	1.00	61
24/8	24.0	0.40	8.0	1.20	61
40/13	40.0	0.40	13.0	1.25	61

SUMITUBE™

A
LA
A4
C
C (UL)
D
A2

B
LB

F (Z)
F3 (Z)
NHR2
NHR4
R
V (300V)

F2 (Z)
F4 (Z)
B2
B2 (3X)
B8
V (600V)
K

K2

AN25

B6

O2C
W3C

O2B2
W3F2
W3B2
W3B2 (4X)
SA2
SA3

W

IRRAX™TUBE IRRAX™TAPE

A
B
F2
F2 (UL)
V2
RP3
B8
ER2
NHR
NHR4
FE2
VZL

IRRAX™SLEEVE

SCM2
SBI
300/350
SCD
SNHM

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