

# SA3 CAP

[Sealing caps for automobiles, flame-retarded heat-shrinkable tubing with meltable adhesive]

✓ RoHS directive 10 substances

Waterproofing

Flame-retarded

UL recognized

CSA recognized



## Basic Properties

- Material: Outer: Irradiated cross-linked semi-rigid flame-retarded polyolefin  
Inner : Meltable adhesive
- Shrink temperature: min. 135°C
- Shrink ratio: Radial change: min. 75%
- Continuous operating temperature: -40 to 105°C

## Features

- High shrink ratio and effective for waterproofing of multiple harness terminations
- Retains positioning at high temperature
- Flame-retarded outer jacket (PBDE/PBB-free)
- Abrasion resistant

## Applications

- Waterproof sealing, insulation and reinforcement for harness joints and splices of motor vehicles/electronic devices

## Colors

- Black

A
C
A4
LA
C (UL)
D
A2
B
LB
F (Z)
F3 (Z)
NHR2
NHR4
V (300V)
V (600V)
F2 (Z)
F4 (Z)
B2
B2 (3X)
B8
K
K2
KH200 (TW)
KH230 (TW)
B6
R
AN25
W
O2C
W3C
O2B2
W3F2
W3B2
W3B2 (4X)
SA2
SA3

## IRRAX™TUBE IRRAX™TAPE

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

## IRRAX™SLEEVE

SCM2
SBI 300/350
SNHM

## Composite articles

### SUMISEAL

### SUMITUBE SA3 CAP

## Processing equipment

### SUMISHRINKER / HEATING GUN

## Properties

Properties	Items	Requirements	Typical values*1
Mechanical	Tensile strength*2	min. 10.4MPa	25.8MPa
	Elongation	min. 300%	550%
	Heat shock	225°C x 4 hours, no crack	Pass
	Heat resistance	130°C x 7 days, no crack	Pass
	Secant modulus	min. 150MPa	463MPa
	Dynamic cut-through	min. 134N	529N
Electrical	Dielectric strength	min. 15kV/mm	20.6kV/mm
	Volume resistivity	min. 1.0 x 10 <sup>12</sup> Ω·cm	9.6 x 10 <sup>15</sup> Ω·cm
Chemical	Flammability	SAE J1128, self-extinguish within 70 sec.	Pass
Splice performance (on representative splice configurations)	Testing to SFP internal standard		
	• Heat aging: 125°C x 1008 hours		Pass
	• Heat cycle: 125 cycles, 125°C (30 minutes) to -40°C (30 minutes)		Pass
	• Fluid resistance: 2-hour immersion in: brake fluid, engine coolant, ASTM Reference Oil #3, automatic transmission fluid		Pass

\*1: For reference use only \*2: Calculated by using outer cross section

## Sizes

Trade size (mm)	As supplied (mm)		After recovered (mm)			Unit length (min.) (m)	Marking of Surface
	Inside diameter (min.)	Wall thickness*3 (nom.)	Inside diameter (max.)	Wall thickness*3 (min.)	Adhesive thickness (nom.)		
5.8/1.2 × 50L	5.80	0.45	1.26	1.20	0.56	50 ± 3	SA3-1
7.5/1.6 × 50L	7.5	0.60	1.64	1.52	0.76	50 ± 3	SA3-2
10.9/2.4 × 50L	10.9	0.70	2.40	1.91	1.02	50 ± 3	SA3-3

\*3: Including inner adhesive