

# SUMITUBE™ W3C

[Dual wall heat-shrinkable tubing with meltable adhesive for waterproofing of irregular-shaped objects]

Catalog No. 842 ✓ RoHS directive

Waterproofing Flame-retarded UL recognized CSA recognized



## Basic Properties

- Material : Outer: Irradiated cross-linked flexible polyolefin  
: Inner: Meltable adhesive
- Shrink temperature : min. 115°C
- Shrink ratio : Radial change: min. 60%  
: Longitudinal change: min. -15%
- Continuous operating temperature : -55 to 105°C

## Features

- Watertight sealing with good adhesion to metals, polyolefin and PVC
- Flexible
- Thicker adhesive (than SUMITUBE™ O2C)

## Specifications/Approvals

SFP standard (R4-2081)

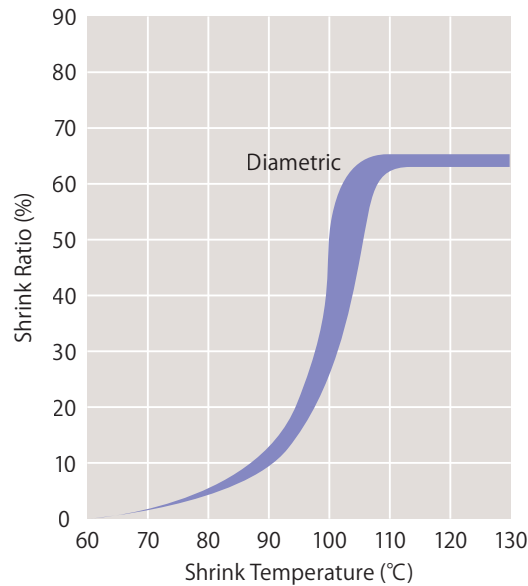
## Applications

- Waterproof sealing for electronic devices with irregular shapes
- Encapsulation for wire branches
- Insulation and protection of wire joints

## Colors

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

## Shrink Properties



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

| Properties | Items                             | Requirements                     | Typical values*1            |
|------------|-----------------------------------|----------------------------------|-----------------------------|
| Mechanical | Tensile strength (before aging)*2 | min. 10.4MPa                     | 13.9MPa                     |
|            | Tensile strength (after aging)*2  | 136°C x 7 days, min. 7.3MPa      | 12.9MPa                     |
|            | Elongation (before aging)         | min. 200%                        | 562%                        |
|            | Elongation (after aging)          | 136°C x 7 days, min. 100%        | 500%                        |
| Electrical | Dielectric withstand              | AC2.5kV x 60 sec., no breakdown  | Pass                        |
|            | Volume resistivity                | min. 1.0 x 10 <sup>14</sup> Ω·cm | 1.6 x 10 <sup>16</sup> Ω·cm |
| Chemical   | Corrosion against bare copper     | 121°C x 16 hours, no corrosion   | Pass                        |
|            | Flammability                      | Flammable                        | —                           |

\*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*3 (nom.) | Inside diameter (max.) | Wall thickness*3 (nom.) | Adhesive thickness (nom.) |                        |
| 1/8                 | 3.20                   | 0.35                    | 0.60                   | 0.95                    | 0.35                      | 1.22                   |
| 3/16                | 4.80                   | 0.45                    | 1.50                   | 1.10                    | 0.60                      | 1.22                   |
| 1/4                 | 6.4                    | 0.45                    | 2.00                   | 1.20                    | 0.65                      | 1.22                   |
| 3/8                 | 9.5                    | 0.50                    | 3.00                   | 1.30                    | 0.65                      | 1.22                   |
| 1/2                 | 12.7                   | 0.55                    | 4.00                   | 1.40                    | 0.75                      | 1.22                   |
| 3/4                 | 19.1                   | 0.65                    | 8.0                    | 1.60                    | 0.80                      | 1.22                   |
| 1                   | 25.4                   | 0.75                    | 10.2                   | 1.90                    | 0.80                      | 1.22                   |

\*3: Including inner adhesive

## SUMITUBE™

|            |
|------------|
| A          |
| LA         |
| A4         |
| SUMITUBE C |
| C (UL)     |
| D          |
| A2         |

## SUMITUBE™

|               |
|---------------|
| B             |
| LB            |
| F (Z)         |
| F3 (Z)        |
| SUMITUBE NHR2 |
| NHR4          |
| R             |
| V(300V)       |

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

## SUMITUBE™

|    |
|----|
| K2 |
|----|

## SUMITUBE™

|      |
|------|
| AN25 |
|------|

## SUMITUBE™

|    |
|----|
| B6 |
|----|

## SUMITUBE™

|     |
|-----|
| O2C |
| W3C |

## SUMITUBE™

|          |
|----------|
| O2B2     |
| W3F2     |
| W3B2     |
| W3B2(4X) |
| SA2      |
| SA3      |

## SUMITUBE™

|   |
|---|
| W |
|---|

## IRRAX™TUBE IRRAX™TAPE

|               |
|---------------|
| A             |
| B             |
| F2            |
| F2 (UL)       |
| V2            |
| IRRAXTUBE RP3 |
| B8            |
| ER2           |
| NHR           |
| NHR4          |
| FE2           |

## IRRAX™TUBE

|     |
|-----|
| VZL |
|-----|

## IRRAX™TAPE

|     |
|-----|
| VZL |
|-----|

## IRRAX™SLEEVE

|         |
|---------|
| SCM2    |
| SBI     |
| 300/350 |
| SCD     |
| SNHM    |

## Composite articles

|          |
|----------|
| SUMISEAL |
| SA3 CAP  |

## Processing equipment

|                            |
|----------------------------|
| SUMISHRINKER / HEATING GUN |
|----------------------------|