

SUMITUBE™

# IRRAX™ TUBE ER2

[150°C heat-resistant flame-retarded tubing]

 RoHS directive 10 substances

Waterproofing

Flame-retarded

UL recognized

CSA recognized



## Basic Properties

- Material: Cross-linked flexible flame-retarded polyolefin
- Continuous operating temperature: -55 to 150°C

## Features

- Highly heat resistant
- Flame-retarded (PBDE/PBB-free)
- Excellent abrasion resistance

## Specifications/Approvals

SFP standard (RE1-2998)

## Marking on Surface

◆ SUMITOMO IRRAX™ TUBE ER2

## Applications

- Insulation and heat protection of wire harnesses and parts for automobiles
- Protection of wiring where flame retardance is required
- Protection of lead wires and parts which are subject to high temperature

## Colors

- Black

## Properties

Properties	Items	Requirements	Typical values*
Mechanical	Tensile strength (before aging)	min. 15.7MPa	23.4MPa
	Tensile strength (after aging)	180°C x 200 hours, min. 9.8MPa	22.2MPa
	Elongation (before aging)	min. 150%	430%
	Elongation (after aging)	180°C x 200 hours, min. 50%	420%
	Heat shock	250°C x 4 hours, no crack	Pass
	Cold bend	-55°C x 4 hours, no crack	Pass
	Secant modulus	107.9±19.6MPa	106.4MPa
Electrical	Dielectric withstand (before aging)	AC2.5kV x 60 sec., no breakdown	Pass
	Dielectric withstand (after aging)	180°C x 200 hours, AC2.5kV x 60 sec., no breakdown	Pass
	Volume resistivity	min. 1.0 x 10 <sup>10</sup> Ω·cm	1.8 x 10 <sup>15</sup> Ω·cm
Chemical	Flammability	Flame-retarded (UL224 All Tubing Flame Test)	Pass

\*: For reference use only

## Sizes

Trade size (mm)	Inside diameter (mm)	Wall thickness (mm)	Unit length (m)
6 × 0.45	6.0 ± 0.5	0.45 ± 0.05	200 min.
8 × 0.45	8.0 ± 0.5	0.45 ± 0.05	100 min.
10 × 0.45	10.0 ± 0.5	0.45 ± 0.05	100 min.
12 × 0.45	12.0 ± 0.5	0.45 ± 0.05	100 min.

Longitudinal change: min. -10% (125°C x 5 minutes)

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)
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KH230 (TW)
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B6
R
AN25

W
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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