

What is the material of fiber optic heat shrink tubing



Article Overview

Fiber optic heat shrink tubing is primarily made of cross-linked polyolefin, an inner hot melt adhesive (often EVA), and a stainless steel or ceramic reinforcement rod.

Fiber optic heat shrink tubing is a specialized protective sleeve used to safeguard fiber optic splices. Its outer layer is made of cross-linked polyolefin, a polymer that provides excellent temperature resistance, mechanical strength, and elongation properties, allowing the tubing to shrink tightly around the fiber when heat is applied. The inner layer consists of a hot melt adhesive, typically made from Ethylene Vinyl Acetate (EVA), which melts during heating to form a moisture-proof seal around the fiber, preventing water, dust, and humidity from affecting the splice. To provide structural support and prevent micro-bending or breakage, a reinforcement rod is included, usually made of stainless steel or ceramic. This rod ensures the splice remains rigid and maintains optical transmission performance during handling and installation. Some fiber optic heat shrink tubes also feature a clear sleeve, allowing visual inspection of the splice before shrinkage, and a sealing structure that ensures reliable performance under varying temperature and humidity conditions. In summary, the typical construction of fiber optic heat shrink tubing includes:

- Outer tube: Cross-linked polyolefin for heat shrink and mechanical protection
 - Inner adhesive liner: EVA hot melt for moisture sealing
 - Reinforcement rod: Stainless steel or ceramic for structural support
- This combination of materials ensures mechanical strength, environmental protection, and preservation of optical transmission at the splice point.

Article Content

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Heat Shrink Tubing Buyer's Guide: Materials, Ratios & Standards

Industrial guide to heat shrink tubing: materials, shrink ratios, temperature, dielectric strength, and UL 224/UL

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40mm Clear PE Heat Shrinkable Tube Fiber Optical

The fiber optic heat shrink tubes is tight and the metal support maintains its strength to prevent the fiber

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Heat Shrink Tubing Buyer's Guide: Materials, Ratios & Standards

In summary, heat shrink tubing functions as insulation, environmental seal, and mechanical armor in one step. The

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Heat Shrink Tubing for Fiber Optic Closures

Heat Shrink Tubing for Fiber Optic Closures (terminal box) is with a layer of spiral coated hot melt adhesive in the internal surface.

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Heat Shrink Tubing for Cable Insulation & Protection

Heat shrink tubing is a versatile solution used for insulation, protection, and strain relief for cables,

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Fiber optic cable protection

Our fiber optic heat-shrink sleeves are made of high-quality materials such as PEEK, PFA, FEP, PTFE,

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Fiber optic closure heat shrink tubing BH-FOCT

Applications: BH-FOCT Fiber optic closure heat shrink tubing is made of medium wall heat shrinkable tube,

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Heat Shrink Tube : What Is Shrink Tubing Used For?

Fiber optic cables are fragile, and shrink tubing provides added durability while maintaining flexibility and signal integrity. It is also

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Heat Shrink Tubing Materials: Your Best Options for Protection

Explore heat shrink tubing materials, their benefits, and applications. Find the right tubing for long-lasting secure

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Heat shrink sizing and materials | Essentra Components US

The heat shrink process involves using a heat gun or specialized heat shrink oven. When applied to the heat shrink

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How to Protect Fiber Optic Cables with Heat Shrink Tubing

How Heat Shrink Tubing Improves Telecom Performance • Ensures Long-Term Durability and Reliability: Protects

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What Is Heat Shrink Tubing Made Of? All Materials

Most heat shrink tubing is made of polyolefin, a family of plastics that includes polyethylene and polypropylene.

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Heat Shrink Tubing | TE Connectivity

Heat shrink tubing provides electrical insulation, mechanical protection, environmental sealing, and strain

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Types of Heat Shrink: What They Are, and What They're For

Heat shrink tubing is an essential material for protecting, insulating, and organizing electrical wiring across industries.

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Heat Shrinkable Tubing for Fibre Optic Splice Closure

Manufactured from cross-linked polyolefin, this tubing combines UV stability, corrosion resistance, and high mechanical strength,

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Fiber Optic Protection Splicing Sleeves Heat Shrink Tube

A specially designed cross-linked clear heat shrinkable tubing, with clear fusion tubing liner, providing strength member and

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A Complete Guide to Fiber Optic Heat Shrink ...

Fiber optic heat shrink tubing plays a vital role in protecting, organizing, and reinforcing optical fibers during installation and

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Optical Fiber Heat Shrink Tube | Fiber Optic Heat

I Consist of cross-linked polyolefin, hot fusion tubing and stainless reinforced steel rod (quartz or ceramic). I

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What Is Heat Shrink Tubing Made Of? All Materials

Heat shrink tubing comes in several materials, from everyday polyolefin to rugged fluoropolymers. Learn what each is

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Everything there is to know about heat shrink tubing | WKK

Heat shrink tubing is available in a broad range of types and sizes, and is used for a broad range of applications.

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Optic Fiber Heat Shrink Tube

KeHong Enterprises is one of the most professional optic fiber heat shrink tube manufacturers and suppliers. We have our own

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Heat Shrink Tubing for Fiber Optic Closures

Heat Shrink Tubing for Fiber Optic Closures Insutek KFSC series of Fiber Optic splice closure heat shrinkable tube, is kind of

Jan 11, 2026

500pcs Dia 5mm 60mm Length Fiber Heat Shrink tubing fibers

□Protect Fiber Fusion Points□Clear sleeve make it easy to detect splice before shrinkage,The fiber heat shrink

Mar 20, 2026

Fiber Optic Closure Heat Shrink Tube – Maxwell

Heat Shrink Tube for fiber optic closure is made from heavy wall cross-linked polyolefin, coated with spiral polyamide adhesive inside

Jul 12, 2026

Heat Shrink Tube: Types, Materials & Applications

This guide covers all major heat shrink tube types, materials, shrink ratios, and application categories to

Contact Us

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