PEXCO | INSULTAB

Polyolefin

PVC

Specialty

Extruded Tubing

# HEAT SHRINK AND TUBING

PVC, Polyolefin, and Specialty Heat Shrink and Non-Shrink Tubing

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## Polyolefin HS

**Polyolefin heat shrink tubing** is the industry standard for reliable insulation, protection, and sealing across a wide range of electrical and industrial applications. Pexco's polyolefin heat shrink portfolio is engineered to deliver consistent performance in demanding environments, offering options for flexibility, rigidity, high shrink ratios, and adhesive-lined sealing. This family includes flexible, semi-rigid, high-ratio, and multi-wall constructions to support diverse installation and protection requirements.

Designed for wire harnessing, terminal insulation, cable bundling, splicing, and environmental sealing, Pexco polyolefin heat shrink tubing is widely used in automotive, aerospace, electrical, electronics, telecommunications, and general industrial markets. With low recovery temperatures, broad operating temperature ranges, flame-retardant formulations, and compliance with key industry specifications, these products provide distributors with a versatile, high-demand solution set to support a wide range of customer applications and inventory strategies.

- Low recovery temperatures
- Broad operating temperature ranges
- Flame-retardant formulations
- Compliant with Mil. specifications where applicable

# HS-101

## Polyolefin Heat Shrinkable Tubing

## Uses and Features

- Ideal for insulation and strain relief of wire splices, terminals and connections
- Superior performance for bundling and organizing wire harnesses
- Color coding for easy identification of wire, cables, terminals and components
- Can be printed
- Highly flexible
- Highly flame retardant when supplied in colors
- Free of PFAS, polybrominated biphenyls and polybrominated biphenyl oxides and ethers

## Technical Data

- **Shrink ratio:** 2:1
- **Recommended Shrink Temperature:** 90°C–110°C
- **Operating Temperature Range:** -55°C to 135°C
- **Longitudinal Change:** +/- 5%
- **Shelf Life:** 5 years
- **Recommend Storage:** < 27°C
- **Standard Colors:** Clear, Black, White, Red, Yellow, green. Blue
- **Standard Packaging:** Spooled

## Certifications

- UL 224 VW-1, 125° C, 600 V
- CSA, 125° C, 600 V
- SAE AS23053/5 Class 1 & 3 (Colors)
- SAE AS23053/5 Class 2 (Clear)

## Summary of Properties

| Category | Property | Units | Value |
|---|---|---|---|
| Mechanical | Specific Gravity (max) | g/cc | 1.35 |
| | Tensile Strength | psi | 1500 (min) |
| | Ultimate Elongation | % | 200 |
| | Water Absorption | % | 0.1 (max) |
| Electrical | Volume Resistivity | ohn-cm | $10 \times 10^{14}$ |
| | Dielectric Strength | v/mil | 900 |
| Thermal | Flamability (colors only) | N/A | VW-1 |
| | Heat Aging (Elongation after 7 days @ 175°C) | % | 400 |
| | Heat Shock (4hs @ 250°C) | N/A | Pass |

| | Minimum Expanded I.D. | | Maximum Recovered I.D. | | Recovered Wall Nominal | | Standard Packaging (per box) Product on Spools | | |
|---|---|---|---|---|---|---|---|---|---|
| Size | in. | mm | in. | mm | in. | mm | ft. / Spool | Total ft. / Box | 4 Foot Lengths |
| 3/64 | .046 | 1.17 | .023 | 0.58 | .016 | 0.41 | 1,000′ | 3,000′ | 1,000′ |
| 1/16 | .063 | 1.60 | .031 | 0.79 | .017 | 0.43 | 1,000′ | 3,000′ | 1,000′ |
| 3/32 | .093 | 2.36 | .046 | 1.17 | .020 | 0.51 | 500′ | 1,500′ | 1,000′ |
| 1/8 | .125 | 3.18 | .062 | 1.57 | .020 | 0.51 | 500′ | 1,500′ | 1,000′ |
| 3/16 | .187 | 4.75 | .093 | 2.36 | .020 | 0.51 | 250′ | 750′ | 1,000′ |
| 1/4 | .250 | 6.35 | .125 | 3.18 | .025 | 0.64 | 200′ | 600′ | 800′ |
| 3/8 | .375 | 9.53 | .187 | 4.75 | .025 | 0.64 | 200′ | 600′ | 500′ |
| 1/2 | .500 | 12.70 | .250 | 6.35 | .025 | 0.64 | 200′ | 600′ | 400′ |
| 3/4 | .750 | 19.05 | .375 | 9.53 | .025 | 0.76 | 200′ | 600′ | 200′ |
| 1 | 1.000 | 25.40 | .500 | 12.70 | .030 | 0.89 | 100′ | 300′ | 96′ |
| 1 1/4 | 1.250 | 31.75 | .625 | 15.87 | .035 | 1.02 | 100′ | 300′ | 96′ |
| 1 1/2 | 1.500 | 38.10 | .750 | 19.05 | .040 | 1.02 | 100′ | 200′ | 96′ |
| 2 | 2.000 | 50.80 | 1.000 | 25.40 | .045 | 1.14 | 100′ | 200′ | 96′ |
| 3 | 3.000 | 76.20 | 1.500 | 38.10 | .050 | 1.27 | 50′ | 50′ | 48′ |
| 4 | 4.000 | 101.60 | 2.000 | 50.80 | .055 | 1.40 | 50′ | 50′ | 48′ |

*Pressurized Spools

# HS-101-SR

## Semi-Rigid Polyolefin Heat Shrink

## Uses & Features

- Ideal for insulation and splicing of wire harnesses and terminals
- Added rigidity provides strain relief in wire harness applications
- Provides improved abrasion resistance over standard Polyolefin Heat Shrink
- Added rigidity eases installation over stiff substrates
- Strong resistance to moisture and common chemicals
- Halogen free
- Lead free and RoHS compliant
- Standard sizes available
- Custom colors quoted on request

## Technical Data

**Shrink ratio:** 2:1

**Recommended Shrink Temperature:** 110°C – 135°C

**Operating Temperature:** -55°C – 135°C

**Longitudinal Change:** +/- 5%

**Shelf Life:** 5 Years

**Recommended Storage:** 10 – 27°C

**Standard Colors:** Black

**Standard Packaging:** Spooled

## Certifications

UL 224 VW-1, 125° C, 600 V

## Semi-Rigid Polyolefin Heat Shrink

HEAT SHRINK

## Summary of Properties

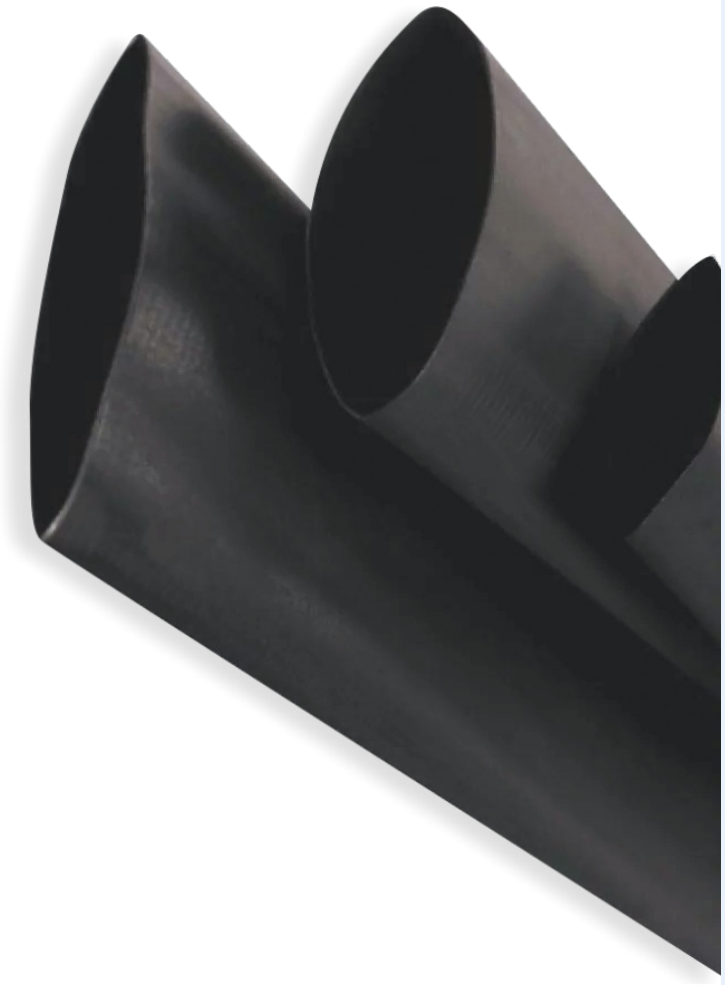
| Category | Property | Units | Value |
|---|---|---|---|
| Mechanical | Specific Gravity | g/cc | 1.35 |
| | Tensile Strength | psi | 1800 |
| | Ultimate Elongation | % | 200 |
| Electrical | Volume Resistivity | Ω-cm | $3.7x10^{14}$ |
| | Dielectric Strength | V | 19kV |
| Thermal | Flammability | n/a | VW-1 |
| | Cold Bend | n/a | Pass |

## Standard Sizes

| | Expanded I.D. Minimum | | Recovered I.D. Maximum | | Recovered Wall Nominal | | Standard Packaging (per box) Product on Spools | |
|---|---|---|---|---|---|---|---|---|
| Size | in. | mm | in. | mm | in. | mm | ft. / Spool | Total ft. / Box |
| 3/32 | .093 | 2.36 | .046 | 1.17 | .020 | 0.51 | 500′ | 1,500′ |
| 1/8 | .125 | 3.18 | .062 | 1.57 | .020 | 0.51 | 500′ | 1,500′ |
| 3/16 | .187 | 4.75 | .093 | 2.36 | .020 | 0.51 | 250′ | 750′ |
| 1/4 | .250 | 6.35 | .125 | 3.18 | .025 | 0.64 | 200′ | 600′ |
| 3/8 | .375 | 9.53 | .187 | 4.75 | .025 | 0.64 | 200′ | 600′ |
| 1/2 | .500 | 12.70 | .250 | 6.35 | .025 | 0.64 | 200′ | 600′ |
| 3/4 | .750 | 19.05 | .375 | 9.53 | .030 | 0.76 | 200′ | 600′ |
| 1 | 1.000 | 25.40 | .500 | 12.70 | .035 | 0.89 | 100′ | 300′ |

# HS-101-3X

## Polyolefin Heat Shrinkable Tubing



## Uses and Features

- Same proven performance of HS-101 with a higher shrink ratio
- Designed to insulate over-sized components in-line with wiring
- Excellent for coving irregular shaped substrates
- Ideal for insulation and strain relief of wire splices, terminals and connectors
- Excellent for surface printing
- Very flexible

## Technical Data

- **Shrink ratio:** 3:1
- **Recommended Shrink Temperature:** 90°C
- **Operating Temperature Range:** -55°C to 135°C
- **Longitudinal Change:** +0 / -15%
- **Shelf Life:** 5 Years
- **Recommend Storage:** <27°C
- **Standard Colors:** Black
- **Standard Packaging:** 4' Lengths, Spooled

## Certifications

**UL 224 VW-1, 125°C, 600V**

## Summary of Properties

| Category | Property | Units | Value |
|---|---|---|---|
| Mechanical | Specific Gravity | g/cm² | 1.29 |
| | Tensile Strength | psi | 1754 |
| | Ultimate Elongation | % | 440 |
| Electrical | Volume Resistivity | ohm-cm | 1015 |
| | Dielectric Strength | vpm | 700 |
| Thermal | Flammability | N/A | VW-1 |
| | Heat Aging (Elongation – 7 days @158°C) | % | 450 |
| | Heat Shock (4hrs @ 250°C) | N/A | Pass |
| | Low-Temp Flexibility (4hrs @ -55°C) | N/A | Pass |

| | Minimum Expanded I.D. | | Maximum Recovered I.D. | | Recovered Wall Nominal | | Standard Packaging (per box) Product on Spools | |
|---|---|---|---|---|---|---|---|---|
| Size | in. | mm | in. | mm | in. | mm | ft. / Spool | Total ft. / Box |
| 1/16 | 0.59 | 1.50 | .020 | 0.50 | .018 | 0.45 | 1,000' | 3,000' |
| 1/8 | .118 | 3.00 | .039 | 1.00 | .022 | 0.55 | 500' | 1,500' |
| 1/4 | .236 | 6.00 | .079 | 2.00 | .026 | 0.65 | 200' | 600' |
| 3/8 | .354 | 9.00 | .118 | 3.00 | .030 | 0.75 | 200' | 600' |
| 1/2 | .472 | 12.00 | .157 | 4.00 | .030 | 0.75 | 200' | 600' |
| 3/4 | .709 | 18.00 | .236 | 6.00 | .030 | 0.75 | 200' | 600' |
| 1 | .954 | 24.00 | .315 | 8.00 | .039 | 100 | 100' | 300' |
| 1 1/2 | 1.535 | 39.00 | .512 | 13.00 | .045 | 1.15 | 100' | 200' |

# HS-101-MW-2:1

## Multi-Wall Polyolefin Heat Shrinkable Tubing

## Uses and Features

- Thin wall heat shrinkable tubing with a thin, adhesive thermoplastic liner
- Provides a permanent, flexible, waterproof seal to protect against fluids, moisture and corrosion
- Ideal for wire splicing and encapsulation of sensors and connectors and terminals in marine environments
- Bonds to a wide variety of plastics, rubbers and metals

## Technical Data

**Shrink ratio:** 2:1

**Recommended Shrink Temperature:** 121°C

**Operating Temperature Range:** -55°C to 110°C

**Longitudinal Change:** +1 / -5%

**Shelf Life:** 3 years

**Recommend Storage:** <27°C

**Standard Colors:** Black

**Standard Packaging:** Spooled, 4' lengths

## Certifications

**UL 224 125°C, 600 V**

**SAE AS23053/4 Class 2**

# Multi-Wall Polyolefin Heat Shrinkable Tubing

HEAT SHRINK

## Summary of Properties

| Category | Property | Units | Value |
|---|---|---|---|
| Mechanical | Specific Gravity | g/cc | 1.3 |
| | Tensile Strength | psi | 1500 |
| | Min. Ultimate Elongation | % | 200 |
| | Secant Modulus (max) | psi | $2.4 \times 10^4$ |
| | Water Absorption (max) | % | 0.5 |
| Electrical | Volume Resistivity | ohn-cm | $1 \times 10^{14}$ |
| | Dielectric Strength (min) | v/mil | 500 |
| | Heat Shock* (4hs @ 250°C) | N/A | Pass |
| | Low Temp. Flexibility (4hrs @ -55°C) | N/A | Pass |

* Outer jacket only

| Adhesive Peel Strength | | |
|---|---|---|
| Substance | UOM | Typical Value |
| Polyethelyene | pli | 30 |
| PVC | pli | 10 |
| Lead | pli | 15 |
| Aluminum | pli | 40 |

| | Minimum Expanded I.D. | | Maximum Recovered I.D. | | Total Recovered Wall Thickness Nominal | | Meltable Recovered Wall Thickness Nominal | | Standard Packaging (per box) Product on Spools | | 4-Ft Lengths |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Size | in. | mm | in. | mm | in. | mm | in. | mm | ft. / Coil or Spool | Total ft./Box | |
| 1/8 | .125 | 3.18 | .063 | 1.60 | .027 | 0.68 | .004 | 0.10 | 500′ | 1,500′ | 1,000′ |
| 3/16 | .187 | 4.75 | .093 | 2.36 | .027 | 0.68 | .004 | 0.10 | 250′ | 750′ | 1,000′ |
| 1/4 | .250 | 6.35 | .125 | 3.18 | .030 | 0.76 | .005 | 0.13 | 200′ | 600′ | 800′ |
| 3/8 | .375 | 9.53 | .187 | 4.75 | .031 | 0.79 | .005 | 0.13 | 200′ | 600′ | 500′ |
| 1/2 | .500 | 12.70 | .250 | 6.35 | .032 | 0.81 | .006 | 0.15 | 200′ | 600′ | 300′ |
| 3/4 | .750 | 19.05 | .375 | 9.53 | .037 | 0.94 | .006 | 0.15 | 200′ | 600′ | 180′ |
| 1 | 1.000 | 25.40 | .500 | 12.70 | .046 | 1.17 | .008 | 0.20 | 100′ | 300′ | 96′ |
| 1 1/2 | 1.500 | 38.10 | .750 | 19.05 | .049 | 1.24 | .008 | 0.20 | N/A | N/A | 96′ |
| 2 | 2.000 | 50.80 | 1.000 | 26.40 | .060 | 1.52 | .015 | .038 | N/A | N/A | 96′ |

# HS-101-MW

## Multi-Wall Polyolefin Heat Shrinkable Tubing

## Uses and Features

- Heat shrinkable tubing with a thin, adhesive thermoplastic liner
- Provides a permanent, flexible, waterproof seal to protect against fluids, moisture, and corrosion
- Ideal for wire splicing and encapsulation of sensors and connectors and terminals in marine environments
- Bonds to a wide variety of plastics, rubbers, and metals

## Technical Data

**Shrink ratio:** 2.5:1

**Recommended Shrink Temperature:** 135°C

**Operating Temperature Range:** -55°C to 110°C

**Longitudinal Change:** +1 / -10%

**Shelf Life:** 3 years

**Recommend Storage:** <27° C

**Standard Colors:** Black

**Standard Packaging:** 4' lengths

## Certifications

**UL 224, 125°C, 600 V**

**SAE AS23053/4 Class 1**

## Summary of Properties

| Category | Property | Units | Value |
|---|---|---|---|
| Mechanical | Specific Gravity | $g/cm^2$ | 1.0 |
| | Tensile Strength (min) | psi | 1500 |
| | Ultimate Elongation (min) | % | 200 |
| | Water Absorption (max) | % | 0.5 |
| Electrical | Volume Resistivity | ohm-cm | $1 \times 10^{15}$ |
| | Dielectric Strength (min) | v/mil | 500 |
| Thermal | Heat Shock* (4hs @ 250°C) | N/A | Pass |
| | Low Temp. Flexibility (4hrs @ -55°C) | N/A | Pass |

| Adhesive Peel Strength | | |
|---|---|---|
| Substance | UOM | Typical Value |
| Polyethelyene | pli | 30 |
| PVC | pli | 10 |
| Lead | pli | 15 |
| Aluminum | pli | 40 |

| | Minimum Expanded I.D. | | Maximum Recovered I.D. | | Total Recovered Wall Thickness Nominal | | Meltable Recovered Wall Thickness Nominal | | Standard Packaging (per box) 4-Ft Lengths |
|---|---|---|---|---|---|---|---|---|---|
| Size | in. | mm | in. | mm | in. | mm | in. | mm | Box Contents |
| 1/8 | .125 | 3.18 | .023 | 0.58 | .038 | 0.97 | .020 | 0.51 | 200′ |
| 3/16 | .187 | 4.75 | .060 | 1.52 | .043 | 1.09 | .025 | 0.64 | 200′ |
| 1/4 | .250 | 6.35 | .080 | 2.03 | .047 | 1.19 | .027 | 0.69 | 100′ |
| 3/8 | .375 | 9.53 | .130 | 3.42 | .050 | 1.27 | .030 | 0.76 | 100′ |
| 1/2 | .500 | 12.70 | .196 | 4.95 | .055 | 1.40 | .035 | 0.89 | 100′ |
| 3/4 | .750 | 19.05 | .313 | 7.95 | .065 | 1.65 | .040 | 1.02 | 60′ |
| 1 | 1.000 | 25.40 | .400 | 10.16 | .075 | 1.91 | .040 | 1.02 | 48′ |

# HS-101-MW-3:1

## Multi-Wall Polyolefin Heat Shrinkable Tubing

## Uses and Features

- Heat shrinkable tubing with a thin, adhesive thermoplastic liner
- Higher shrink ratio allows for a broader range of applications
- Provides a permanent, flexible, waterproof seal to protect against fluids, moisture and corrosion
- Ideal for wire splicing and encapsulation of sensors, connectors and terminals in marine environments
- Bonds to a wide variety of plastics, rubbers and metals

## Technical Data

- **Shrink ratio:** 3:1
- **Recommended Shrink Temperature:** 110°C
- **Operating Temperature Range:** -55°C to 125°C
- **Longitudinal Change:** +5 / -15%
- **Shelf Life:** 3 Years
- **Recommend Storage:** <27°C
- **Standard Colors:** Black
- **Standard Packaging:** Spooled and 4' lengths

## Certifications

- **UL 224, 125° C, 600 V**
- **SAE AS23053/4 Class 3**

## Multi-Wall Polyolefin Heat Shrinkable Tubing

HEAT SHRINK

### Summary of Properties

| Category | Property | Units | Value |
|---|---|---|---|
| Mechanical | Specific Gravity | $g/cm^2$ | 1.0 |
| | Tensile Strength | psi | 2080 |
| | Ultimate Elongation | % | 400 |
| | Water Absorption | % | .49 |
| Electrical | Volume Resistivity | ohm-cm | $2.11 \times 10^{15}$ |
| | Dielectric Strength | vpm | 900 |
| Thermal | Cold Impact (-55°C x 3min) | N/A | Pass |

| Adhesive Peel Strength | | |
|---|---|---|
| Substance | UOM | Typical Value |
| Polyethelyene | pli | 30 |
| PVC | pli | 10 |
| Lead | pli | 15 |
| Aluminum | pli | 40 |

| | Minimum Expanded I.D. | | Maximum Recovered I.D. | | Recovered Wall Nominal | | Recovered Melt Wall Nominal | | Standard Packaging (per box) 4-Foot Lengths |
|---|---|---|---|---|---|---|---|---|---|
| Size | in. | mm | in. | mm | in. | mm | in. | mm | Box Contents |
| 1/8 | .125 | 3.18 | .023 | 0.58 | .038 | 0.97 | .020 | 0.51 | 200' |
| 3/16 | .187 | 4.75 | .060 | 1.52 | .043 | 1.09 | .025 | 0.64 | 200' |
| 1/4 | .250 | 6.35 | .080 | 2.03 | .047 | 1.19 | .027 | 0.69 | 100' |
| 3/8 | .375 | 9.53 | .130 | 3.42 | .050 | 1.27 | .030 | 0.76 | 100' |
| 1/2 | .500 | 12.70 | .196 | 4.95 | .055 | 1.40 | .035 | 0.89 | 100' |
| 3/4 | .750 | 19.05 | .313 | 7.95 | .065 | 1.65 | .040 | 1.02 | 60' |
| 1 | 1.000 | 25.40 | .400 | 10.16 | .075 | 1.91 | .040 | 1.02 | 48' |

# HS-614

## Proprietary, Food Grade Acrylated Olefin — Heat Shrinkable Tubing

### Uses and Features

- Designed for use in applications involving food contact
- Ideal for applications requiring non-toxic materials
- Resistant to most common chemicals and oils
- Resistant to sunlight, moisture and fungus

### Technical Data

**Shrink ratio:** 2:1

**Recommended Shrink Temperature:** 121°C

**Operating Temperature Range:** -55°C to 121°C

**Longitudinal Change:** + / -5%

**Shelf Life:** 3 Years

**Recommend Storage:** <27°C

**Standard Colors:** Clear, Black, Blue, White

**Standard Packaging:** Spooled, 4' lengths

### Certifications

**USFDA Reg. C.F.R. 177.1330**

## Summary of Properties

| Category | Property | Units | Value |
|---|---|---|---|
| Mechanical | Specific Gravity | g/cc | 0.930 |
| | Tensile Strength | psi | 2500 |
| | Min. Ultimate Elongation | % | 500 |
| | Water Absorption | % | 0.5 |
| | Heavy Metals | ppm | 1 (max) |
| Electrical | Dielectric Strength | v/mil | 1800 |

| | Minimum Expanded I.D. | | Maximum Recovered I.D. | | Recovered Wall Nominal | | Standard Packaging (per box) Product on Spools | |
|---|---|---|---|---|---|---|---|---|
| Size | in. | mm | in. | mm | in. | mm | ft. / Spool | Total ft./Box |
| 3/32 | .093 | 2.36 | .046 | 1.17 | .020 | 0.51 | 1,000′ | 2,000′ |
| 1/8 | .125 | 3.18 | .062 | 1.58 | .020 | 0.51 | 1,000′ | 2,000′ |
| 3/16 | .187 | 4.75 | .093 | 2.36 | .020 | 0.51 | 1,000′ | 2,000′ |
| 1/4 | .250 | 6.35 | .125 | 3.18 | .025 | 0.64 | 500′ | 1,000′ |
| 3/8 | .375 | 9.53 | .187 | 4.75 | .025 | 0.64 | 200′ | 600′ |
| 1/2 | .500 | 12.70 | .250 | 6.35 | .025 | 0.64 | 200′ | 600′ |

# HS-714

## Medical Grade, Cross-linked Acrylated Olefin Heat Shrinkable Tubing

### Uses and Features

- Manufactured using a proprietary, USP Class VI certified resin with no additives or fillers
- Offers a bio-compatible jacketing for temporary implantation devices, Ideal for insulating electro-surgical instruments
- Offers unique adhesion properties to metals, glass, and select plastics without the use of adhesive
- Displays superior cut-though, puncture, and abrasion resistance
- Provides excellent resistance to a wide range of chemicals including Saline, Povidone-iodine (Betadine), Benzalkonium (Zephiran), and Alcohol
- Can be printed with USP Class VI inks
- Comes with complete lot traceability
- Alcohol wiped and double-bagged in a clean room environment

### Technical Data

**Shrink ratio:** 2:1

**Recommended Shrink Temperature:** 121°C

**Operating Temperature Range:** -20°C to 121°C

**Longitudinal Change:** +/-5%

**Shelf Life:** 3 years

**Recommend Storage:** <27° C

**Standard Colors:** Clear, White, Black, Blue

**Standard Packaging:** Spooled

### Certifications

**USP Class VI**

**ISO-10993-5**

**USFDA Reg C.F.R 177.1330**

**RoHS Compliant**

USP Class VI and ISO 10993-5 Cytotoxicity documentation provided as post process certification when requested

# Medical Grade, Cross-linked Acrylated Olefin Heat Shrinkable Tubing

HEAT SHRINK

## Summary of Properties

| Category | Property | Units | Value |
|---|---|---|---|
| Mechanical | Specific Gravity | g/cm² | 0.934 |
| | Tensile Strength (min) | psi | 3200 |
| | Ultimate Elongation (min) | % | 500 |
| | Durometer | Shore D | 53 |
| Electrical | Dielectric Strength | v/mil | 1800 |
| | Flammability | N/A | VW-1 |

| Compatible with the following sterilization methods | |
|---|---|
| E-beam and Gamma | Steris Process — Peracetic Acid |
| Autoclave | Hydrogen Peroxide Gas |
| EtO | Glutaraldehyde |

### Autoclave Cycle Test:

**20 cycles @ 121°C 15 psig for 15 min. with fast dry cycle, followed by test for:**

| Property | Test Method | Typical Value |
|---|---|---|
| Volume Resistivity @ 500 volts | ASTM D 257 | No change from original |
| Dielectric Strength in air @ 500 kv/min rise | ASTM D 149 | No change from original |
| Dielectric Constant @ 1 MHz | ASTM D 150 | No change from original |
| Dissipation Factor @ 1 MHz | ASTM D 150 | No change from original |

**Notice to User:** It is imperative that manufacturers and end-users understand that the electro-surgical instruments should be placed separately, without overlay, on autoclave trays. Potential damage caused by overlay in the autoclave will significantly reduce this and any other dielectric insulator's ability to pass the 20 cycles of autoclave required by the AAMI.

All statements and recommendations are based on technical data that PEXCO believes to be true and reliable. It is the responsibility of the user to determine functionality and suitability. If you have any questions on the use or handling of this product, please contact us at **844-352-5777**.

### Standard Dimensions

| | Expanded I.D. Minimum | | Recovered I.D. Maximum | | Recovered Wall Nominal | | Standard Packaging (per Box) Product is Supplied in Coils or on Plastic Spools | |
|---|---|---|---|---|---|---|---|---|
| Size | in. | mm | in. | mm | in. | mm | ft. / Coil or Spool | Total ft./Box |
| 3/32 | .093 | 2.36 | .046 | 1.17 | .020 | 0.51 | 1,000′ | 2,000′ |
| 1/8 | .125 | 3.18 | .062 | 1.58 | .020 | 0.51 | 1,000′ | 2,000′ |
| 3/16 | .187 | 4.75 | .093 | 2.36 | .020 | 0.51 | 1,000′ | 2,000′ |
| 1/4 | .250 | 6.35 | .125 | 3.18 | .025 | 0.64 | 500′ | 1,000′ |
| 3/8 | .375 | 9.53 | .187 | 4.75 | .025 | 0.64 | 200′ | 600′ |
| 1/2 | .500 | 12.70 | .250 | 6.35 | .025 | 0.64 | 200′ | 600′ |

Custom sizes available upon request.

## PVC Heat Shrink

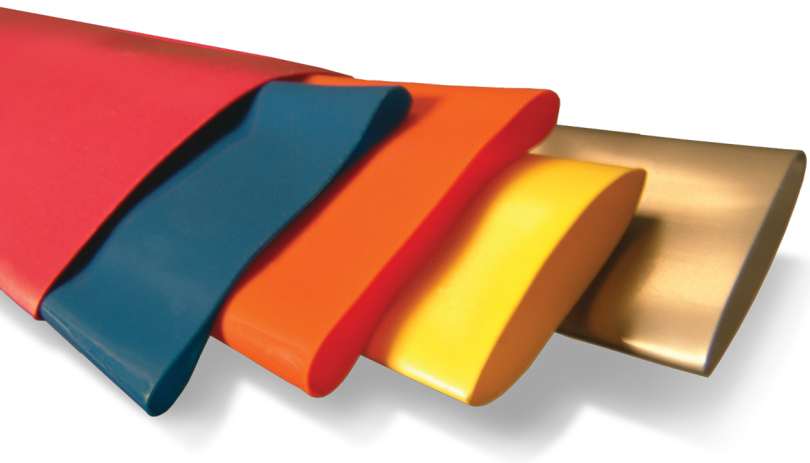
**PVC heat shrink tubing** offers a versatile, cost-effective solution for insulation, protection, and identification across a wide range of electrical and industrial applications. Pexco's PVC heat shrink portfolio includes standard, heavy wall, cross-linked, and adhesive-lined multi-wall constructions, providing options for enhanced durability, environmental sealing, and mechanical protection. Engineered for consistent performance, these products feature low shrink temperatures, reliable flexibility, and strong resistance to UV exposure, chemicals, and moisture.

Designed for wire harnessing, cable bundling, terminal insulation, and strain relief, Pexco's PVC heat shrink tubing is widely used in automotive, electrical, industrial, and general-purpose applications. With proven performance in moderate temperature environments and compliance with key industry standards, this product family offers a dependable, value-driven solution to meet a broad range of customer requirements.

- Low shrink temperatures
- Reliable flexibility
- Strong resistance to UV exposure, chemicals, and moisture

# HS-105

## PVC Heat Shrinkable Tubing



### Uses and Features

- Ideal for applications requiring smooth, tight fitting, aesthetic coverings
- Provides long lasting protection—indoors and outdoors—from UV light, moisture, dirt, abrasion, and most common chemicals and cleaners
- Ability to cover sharp corners and irregular shapes without wrinkling
- Offered in a variety of vibrant colors that will not fade
- Also available in "crystal clear" to offer see-through protection that will not become yellow or cloudy over time
- Highly flame retardant

### Technical Data

**Shrink ratio:** 2:1

**Recommended Shrink Temperature:** 100°C

**Operating Temperature Range:** -20°C to 105°C

**Longitudinal Change:** +/-15%

**Shelf Life:** 1 year

**Recommend Storage:** <21° C

**Standard Colors:** Clear, White, Black, Orange, Blue, Red , Green, Yellow

**Standard Packaging:** Spooled

### Certifications

**UL 224 VW-1, 125° C, 600 V**

**CSA OFT rated for 600 V**

**ASTM D 3150**

**SAE AS23053/2 Class 2**

## Summary of Properties

| Category | Property | Units | Value |
|---|---|---|---|
| Mechanical | Specific Gravity | g/cc | 1.32 |
| | Tensile Strength | psi | 3000 |
| | Min. Ultimate Elongation | % | 300 |
| Electrical | Volume Resistivity | ohm-cm | 21.5 x $10^{12}$ |
| | Dielectric Strength | v/mil | 1,083 |
| Thermal | Flamability | N/A | VW-1 |

| | Expanded I.D. Minimum | | Recovered I.D. Maximum | | Recovered Wall Nominal | | Standard Packaging (per box) Product on Spools | |
|---|---|---|---|---|---|---|---|---|
| Size | in. | mm | in. | mm | in. | mm | ft. / Spool | Total ft. / Box |
| 3/64 | .046 | 1.17 | .023 | 0.58 | .020 | 0.51 | *1,000" | 2,000' |
| 1/16 | .063 | 1.60 | .032 | 0.82 | .020 | 0.51 | *1,000" | 2,000' |
| 3/32 | .093 | 2.36 | .046 | 1.17 | .025 | 0.64 | *1,000" | 2,000' |
| 1/8 | .125 | 3.18 | .063 | 1.60 | .025 | 0.64 | *1,000" | 2,000' |
| 3/16 | .187 | 4.75 | .093 | 2.36 | .025 | 0.64 | *1,000" | 2,000' |
| 1/4 | .250 | 6.35 | .125 | 3.18 | .025 | 0.64 | *1,000' | 2,000' |
| 5/16 | .313 | 7.94 | .157 | 3.99 | .028 | 0.71 | *500' | 1,000' |
| 3/8 | .375 | 9.53 | .187 | 4.75 | .028 | 0.71 | *500' | 1,000 |
| 1/2 | .500 | 12.70 | .250 | 6.35 | .028 | 0.71 | *250' | 500' |
| 1/2 | .500 | 12.70 | .250 | 6.35 | .028 | 0.71 | 500' | 1,000 |
| 5/8 | .625 | 15.88 | .313 | 7.94 | .033 | 0.84 | 250' | 500' |
| 3/4 | .750 | 19.05 | .375 | 9.53 | .033 | 0.84 | 250' | 500' |
| 1 | 1.000 | 25.40 | .500 | 12.70 | .038 | 0.97 | 250' | 500' |
| 1 1/4 | 1.250 | 31.75 | .625 | 15.88 | .041 | 1.04 | 250' | 500' |
| 1 1/2 | 1.500 | 38.10 | .750 | 19.05 | .043 | 1.09 | 100' | 200' |
| 2 | 2.000 | 50.80 | 1.000 | 25.40 | .048 | 1.22 | 100' | 200' |
| 2 1/2 | 2.500 | 63.50 | 1.250 | 31.75 | .058 | 1.47 | 100' | 200' |
| 3 | 3.000 | 76.20 | 1.500 | 38.10 | .068 | 1.73 | 50' | 100' |
| 4 | 4.000 | 101.60 | 2.000 | 50.80 | .073 | 1.85 | 50' | 100' |

*Pressurized Spools

# HS-105 x .032

## Heavy Wall PVC Heat Shrinkable Tubing

## Uses and Features

- Ideal for splicing terminals and wires
- Heavier wall thickness makes HS-105 X .032 ideal for use as a strain relief
- Offers an extra level of abrasion and cut through resistance
- Optimized for use over PVC jacketed wire and cable
- Ability to cover sharp corners and irregular shapes without wrinkling
- Excellent UV stability
- 30% stronger than Polyolefin
- Resistant to most common chemicals and oils

## Technical Data

- **Shrink ratio:** 2:1
- **Recommended Shrink Temperature:** 100°C
- **Operating Temperature Range:** -20°C to 105°C
- **Longitudinal Change:** +/-15%
- **Shelf Life: 1 Year**
- **Recommend Storage:** < 21°C
- **Standard Colors:** Black
- **Standard Packaging:** Spooled

## Certifications

- **UL 224 VW-1, 125° C, 600 V**
- **CSA OFT rated for 600 V**

## Summary of Properties

| Category | Property | Units | Value |
|---|---|---|---|
| Mechanical | Specific Gravity | g/cc | 1.32 |
| | Tensile Strength | psi | 3000 |
| | Min. Ultimate Elongation | % | 300 |
| Electrical | Volume Resistivity | ohm-cm | $21.5 \times 10^{12}$ |
| | Dielectric Strength | v/mil | 1,083 |
| Thermal | Flamability | N/A | VW-1 |

| | Minimum Expanded I.D. | | Maximum Recovered I.D. | | Recovered Wall Nominal | | Standard Packaging (per box) Product on Spools | |
|---|---|---|---|---|---|---|---|---|
| Size | in. | mm | in. | mm | in. | mm | ft. / Spool | Total ft. / Box |
| 1/16 | .063 | 1.60 | .032 | 0.82 | .032 | .081 | *1,000' | *2,000' |
| 3/32 | .093 | 2.36 | .046 | 1.17 | .032 | .081 | *1,000' | *2,000' |
| 1/8 | .125 | 3.18 | .063 | 1.60 | .032 | .081 | *1,000' | *2,000' |
| 3/16 | .187 | 4.75 | .093 | 2.36 | .032 | .081 | *1,000' | *2,000' |
| 1/4 | .250 | 6.35 | .125 | 3.18 | .032 | .081 | *1,000' | *2,000' |
| 5/16 | .313 | 7.94 | .157 | 3.99 | .032 | .081 | *500' | *1,000' |
| 3/8 | .375 | 9.53 | .187 | 4.75 | .032 | .081 | *500' | *1,000' |
| 1/2 | .500 | 12.70 | .250 | 6.35 | .032 | .081 | *250' | *500' |

*Pressurized Spools

# HS-205

## Cross-Linked PVC Heat Shrinkable Tubing

## Uses and Features

- Ideal for insulation and strain relief for wire harnesses, splices and terminals
- Engineered for total compatibility with cross-linked PVC jacketed wire and cable
- Improved solder iron cut-through and abrasion resistance compared to standard PVC
- Ability to cover sharp corners without wrinkling
- Resistant to most common chemicals and oils
- 30% stronger than Polyolefin
- Excellent UV stability
- Flame retardant
- Highly flexible

## Technical Data

- **Shrink ratio:** 2:1
- **Recommended Shrink Temperature:** 100°C
- **Operating Temperature Range:** -20°C to 105°C
- **Longitudinal Change:** +/- 15%
- **Shelf Life:** 3 years
- **Recommend Storage:** <21°C
- **Standard Colors:** Black
- **Standard Packaging:** Spooled

## Certifications

- **UL 224 VW-1, 125° C, 600 V**
- **CSA OFT rated for 600 V**
- **ASTM D 3150**
- **SAE AS23053/2 Class 1** (with the exception of Longitudinal Change)

## Summary of Properties

| Category | Property | Units | Value |
|---|---|---|---|
| Mechanical | Specific Gravity | g/cc | 1.32 |
| | Tensile Strength | psi | 3000 |
| | Min. Ultimate Elongation | % | 300 |
| Electrical | Volume Resistivity | ohn-cm | 21.5 x $10^{12}$ |
| | Dielectric Strength | v/mil | 1,083 |
| Thermal | Flamability | N/A | VW-1 |

| | Minimum Expanded I.D. | | Maximum Recovered I.D. | | Recovered Wall Nominal | | Standard Packaging (per box) Product on Spools | |
|---|---|---|---|---|---|---|---|---|
| Size | in. | mm | in. | mm | in. | mm | ft. / Spool | Total ft. / Box |
| 3/64 | .046 | 1.17 | .023 | 0.58 | .020 | 0.51 | *1,000' | 2,000' |
| 1/16 | .063 | 1.60 | .032 | 0.82 | .020 | 0.51 | *1,000' | 2,000' |
| 3/32 | .093 | 2.36 | .046 | 1.17 | .025 | 0.64 | *1,000' | 2,000' |
| 1/8 | .125 | 3.18 | .063 | 1.60 | .025 | 0.64 | *1,000' | 2,000' |
| 3/16 | .187 | 4.75 | .093 | 2.36 | .025 | 0.64 | *1,000' | 2,000' |
| 1/4 | .250 | 6.35 | .125 | 3.18 | .025 | 0.64 | *1,000' | 2,000' |
| 3/8 | .375 | 9.53 | .187 | 4.75 | .028 | 0.71 | *500' | 1,000' |
| 1/2 | .500 | 12.70 | .250 | 6.35 | .028 | 0.71 | *250' | 500' |
| 3/4 | .750 | 19.05 | .375 | 9.53 | .033 | 0.84 | 250' | 500' |
| 1 | 1.000 | 25.40 | .500 | 12.70 | .038 | 0.97 | 250' | 500' |
| 1 1/2 | 1.500 | 38.10 | .750 | 19.05 | .043 | 1.09 | 100' | 200' |
| 2 | 2.000 | 50.80 | 1.000 | 25.40 | .048 | 1.22 | 100' | 200' |

*Pressurized Spools

# VAT-105

## Multi-Wall, PVC Heat Shrinkable Tubing

## Uses and Features

- The only low shrink temperature PVC with an adhesive liner
- Insulates, protects and seals cables, connectors, splices and terminals
- Bonds firmly with most substrates including PVC jacketed wire and cable
- Ideal for Marine and outdoor applications
- Provides a waterproof bond that won't deteriorate over time
- Resistant to most common chemicals and oils
- Low shrink temperature enables easy recovery over temperature sensitive substrates

## Technical Data

**Shrink ratio:** 2:1

**Recommended Shrink Temperature:** 100°C

**Operating Temperature Range:** -20°C to 105°C

**Longitudinal Change:** +/- 15%

**Shelf Life:** 1 Year

**Recommend Storage:** < 21°C

**Standard Colors:** Black

**Standard Packaging:** Spooled

## Multi-Wall, PVC Heat Shrinkable Tubing

HEAT SHRINK

### Summary of Properties

| Category | Property | Units | Value |
|---|---|---|---|
| Mechanical | Specific Gravity | g/cc | 1.32 |
| | Tensile Strength | psi | 3000 |
| | Ultimate Elongation | % | 300 |
| | Heat Aging* (Elongation after 7 days @136°C) | % | 95 |
| Electrical | Volume Resistivity | ohn-cm | 21.5 x$10^{12}$ |
| | Dielectric Strength | v/mil | 1083 |

| Adhesive Peel Strength | | | |
|---|---|---|---|
| **Test Method** | **Substrate** | **UOM** | **Typical Value** |
| **Lap Shear:** 2" per min, 1" overlap (samples prepared using vinyl adhesive filmes, 5min @ 250°F, 100psi contact pressure) | Vinyl | psi | 155 |
| | Copper | psi | 101 |
| | Steel | psi | 65 |
| | Aluminum | psi | 60 |

| | Minimum Expanded I.D. | | Maximum Recovered I.D. | | Recovered Wall Nominal | | Recovered Melt Wall Nominal | | Standard Packaging (per box) Product on Spools | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Size** | **in.** | **mm** | **in.** | **mm** | **in.** | **mm** | | | **ft. / Spool** | **Total ft. / Box** |
| 3/16 | .187 | 4.75 | .093 | 2.36 | .035 | 0.89 | .007 | .018 | 1,000' | 2,000' |
| 1/4 | .250 | 6.35 | .125 | 3.18 | .035 | 0.89 | .007 | .018 | 1,000' | 2,000' |
| 3/8 | .375 | 9.53 | .187 | 4.75 | .035 | 0.89 | .007 | .018 | 500' | 1,000' |
| 1/2 | .500 | 12.70 | .250 | 6.35 | .035 | 0.89 | .007 | .018 | 250' | 500' |
| 3/4 | .750 | 19.10 | .375 | 9.53 | .040 | 1.02 | .007 | .018 | 100' | 200' |
| 1 | 1.000 | 25.40 | .500 | 12.70 | .045 | 1.14 | .007 | .018 | 100' | 200' |

# VAT-205

## Multi-Wall, Cross-Linked, PVC Heat Shrinkable Tubing

### Uses & Features

- The only cross-linked, heat shrinkable PVC tubing with an adhesive layer
- Ideal for marine and outdoor applications using cross-linked PVC wire and cable
- Waterproof bonding
- UV resistant
- Offers a longer and less heat-sensitive shelf life compared to standard PVC heat shrink
- Improved solder iron cut-through and abrasion resistance compared to standard PVC

### Technical Data

- **Shrink Ratio: 2:1**
- **Recommended Shrinking Temperature:** 100ºC
- **Operating Temperature:** -20ºC–105ºC
- **Longitudinal Change:** +/-15%
- **Shelf Life:** 1 Year
- **Recommend Storage:** - < 21°C
- **Standard Colors:** Black
- **Standard Packaging:** Spooled

# Multi-Wall, Cross-Linked, PVC Heat Shrinkable Tubing

HEAT SHRINK

## Summary of Properties

| Category | Property | Units | Value |
|---|---|---|---|
| Mechanical | Specific Gravity | g/cc | 1.32 |
| | Tensile Strength | psi | 3000 |
| | Ultimate Elongation | % | 300 |
| | Heat Aging* (Tensile after 7 days @136ºC) | % | 102 |
| | Heat Aging* (Elongation after 7 days @136ºC) | % | 95 |
| Electrical | Volume Resistivity | ohn-cm | 21.5 x$10^{12}$ |
| | Dielectric Strength | v/mil | 1083 |

## Peel Strength

| Adhesive Strength | | | |
|---|---|---|---|
| Test Method | Substrate | UOM | Typical Value |
| Lap Shear: 2" per min, 1" overlap (samples prepared using vinyl adhesive films, 5min @ 250ºF, 100psi contact pressure) | Vinyl | psi | 155 |
| | Copper | psi | 101 |
| | Steel | psi | 65 |
| | Aluminum | psi | 60 |

## Standard Sizes

| | Expanded I.D. Minimum | | Recovered I.D. Maximum | | Recovered Outer Wall Nominal | | Recovered Melt Wall Nominal | | Standard Packaging (per box) Product on Spools | |
|---|---|---|---|---|---|---|---|---|---|---|
| Size | in. | mm | in. | mm | in. | mm | in. | mm | ft. / Spool | Total ft. / Box |
| 3/16 | .187 | 4.75 | .093 | 2.36 | .035 | 0.89 | .007 | 0.18 | 1,000′ | 2,000′ |
| 1/4 | .250 | 6.35 | .125 | 3.18 | .035 | 0.89 | .007 | 0.18 | 1,000′ | 2,000′ |
| 3/8 | .375 | 9.53 | .187 | 4.75 | .035 | 0.89 | .007 | 0.18 | 500′ | 1,000′ |
| 1/2 | .500 | 12.70 | .250 | 6.35 | .035 | 0.89 | .007 | 0.18 | 250′ | 500′ |
| 3/4 | .750 | 19.10 | .375 | 9.53 | .040 | 1.02 | .007 | 0.18 | 100′ | 200′ |
| 1 | 1.000 | 25.40 | .500 | 12.70 | .045 | 1.14 | .007 | 0.18 | 100′ | 200′ |

## Specialty Heat Shrink

**Pexco's specialty heat shrink tubing** is engineered for high-performance applications where standard materials are not sufficient. This portfolio includes PVDF, chlorinated polyolefin elastomer, and fluoroelastomer heat shrink solutions designed to withstand extreme temperatures, aggressive chemicals, fuels, and harsh environmental conditions. These materials provide enhanced mechanical strength, superior chemical resistance, and long-term reliability in the most demanding operating environments.

Commonly used in aerospace, defense, automotive, energy, and industrial applications, specialty heat shrink tubing is ideal for fuel line protection, high-temperature insulation, fluid resistance, and exposure to oils, solvents, and corrosive elements. With broad operating temperature ranges and compliance with rigorous industry specifications, Pexco's specialty heat shrink solutions enable distributors to support critical applications where performance, durability, and material integrity are essential.

- Enhanced mechanical strength
- Superior chemical resistance
- Long-term reliability

# HSK-600

## PVDF Heat Shrinkable Tubing

### Uses and Features

- Ideal for high-temperature applications
- Improved chemical resistance when compared to Polyolefin and PVC
- Optimal for use as electrical insulation and strain relief of high temperature wires, solder joints, terminals and connections
- High degree of mechanical strength
- Highly fame retardant
- Outstanding abrasion, cut-through and impact resistance

### Technical Data

- **Shrink ratio:** 2:1
- **Recommended Shrink Temperature:** 175°C
- **Operating Temperature Range:** -55°C to 175°C
- **Longitudinal Change:** +/- 10%
- **Shelf Life:** 5 Years
- **Recommend Storage:** <35°
- **Standard Colors:** Translucent
- **Standard Packaging:** 4' Lengths

### Certifications

- UL 224 VW-1, 150° C, 600 V
- CSA OFT
- SAE AS23053/8

## Summary of Properties

| Category | Property | Units | Value |
|---|---|---|---|
| Mechanical | Specific Gravity | g/cc | 1.8 |
| | Tensile Strength | psi | 5000 |
| | Min. Ultimate Elongation | % | 150 |
| Electrical | Volume Resistivity | ohm-cm | $3.8 \times 10^{15}$ |
| | Dielectric Strength (<.5" Exp I.D.) | v/mil | 1000 |
| | Dielectric Strength (≥ .5" Exp. I.D.) | v/mil | 700 |
| Thermal | Flamability | N/A | VW-1 |

| | Minimum Expanded I.D. | | Maximum Recovered I.D. | | Recovered Wall Nominal | | Standard Packaging (per box) Product on Spools |
|---|---|---|---|---|---|---|---|
| Size | in. | mm | in. | mm | in. | mm | ft. / Spool |
| 3/64 | .046 | 1.17 | .023 | 0.58 | .010 | 0.25 | 1,000′ |
| 1/16 | .063 | 1.60 | .031 | 0.79 | .010 | 0.25 | 1,000′ |
| 3/32 | .093 | 2.36 | .046 | 1.17 | .010 | 0.25 | 1,000′ |
| 1/8 | .125 | 3.18 | .062 | 1.57 | .010 | 0.25 | 1,000′ |
| 3/16 | .187 | 4.75 | .093 | 2.36 | .010 | 0.25 | 800′ |
| 1/4 | .250 | 6.35 | .125 | 3.18 | .012 | 0.30 | 500′ |
| 3/8 | .375 | 9.53 | .187 | 4.75 | .012 | 0.30 | 500′ |
| 1/2 | .500 | 12.70 | .250 | 6.35 | .012 | 0.30 | 400′ |
| 5/8 | .625 | 15.88 | .313 | 7.94 | .014 | 0.36 | 200′ |
| 3/4 | .750 | 19.05 | .375 | 9.53 | .017 | 0.43 | 200′ |
| 1 | 1.000 | 25.40 | .500 | 12.70 | .019 | 0.48 | 120′ |
| 1 1/2 | 1.500 | 38.10 | .750 | 19.05 | .020 | 0.51 | 96′ |

# HSN-100

## Chlorinated Polyolefin Elastomer

### Uses and Features

- Excellent performance in extremely cold environments
- Ideal for rugged applications requiring tough, flexible, highly abrasion-resistant coverings
- Excels as insulation, strain relief, and protection for military and aerospace cables and wire harnesses
- Well suited for severe outdoor environmental conditions
- Resistant to most common chemicals and oils including aviation and vehicle fuels, lubricating oils, acids, solvents and hydraulic fluids
- Easily marked

### Technical Data

- **Shrink ratio:** 2:1
- **Recommended Shrink Temperature:** 130°C
- **Operating Temperature Range:** -70°C to 120°C
- **Longitudinal Change:** +1 / -10%
- **Shelf Life:** 1 Year
- **Recommend Storage:** <35°C
- **Standard Colors:** Black
- **Standard Packaging:** Spooled

### Certifications

**SAE AS23053/1 Class 1 and Class 2**

## Summary of Properties

| Category | Property | Units | Value |
|---|---|---|---|
| Mechanical | Specific Gravity (max) | g/cc | 1.3 |
| | Tensile Strength (min) | psi | 1500 |
| | Min. Ultimate Elongation | % | 250 |
| Electrical | Dielectric Strength | v/mil | 800 |
| | Volume Resistivity | ohm-cm | $1 \times 10^{11}$ |

| | Minimum Expanded I.D. | | Maximum Recovered I.D. | | Recovered Wall Nominal | | Standard Packaging (per box) Product on Spools | |
|---|---|---|---|---|---|---|---|---|
| Size | in. | mm | in. | mm | in. | mm | ft. / Spool | Total ft. / Box |
| 1/8 | .125 | 3.18 | .072 | 1.83 | .030 | 0.76 | 200' | 600' |
| 3/16 | .187 | 4.75 | .106 | 2.69 | .035 | 0.89 | 200' | 600' |
| 1/4 | .250 | 6.35 | .125 | 3.18 | .035 | 0.89 | 200' | 600' |
| 3/8 | .375 | 9.53 | .187 | 4.75 | .040 | 1.02 | 100' | 300' |
| 1/2 | .500 | 12.70 | .250 | 6.35 | .048 | 1.22 | 100' | 300' |
| 5/8 | .625 | 15.88 | .312 | 7.92 | .052 | 1.32 | 100' | 300' |
| 3/4 | .750 | 19.05 | .375 | 9.53 | .057 | 1.45 | 100' | 300' |
| 7/8 | .875 | 22.23 | .437 | 11.10 | .065 | 1.65 | 100' | 300' |
| 1 | 1.000 | 25.40 | .500 | 12.70 | .070 | 1.78 | 100' | 300' |
| 1 1/4 | 1.250 | 31.75 | .625 | 15.54 | .087 | 2.21 | 50' | 100' |
| 1 1/2 | 1.500 | 38.10 | .750 | 19.05 | .095 | 2.41 | 50' | 100' |

# HS-VTN

## Fluoroelastomer Heat Shrinkable Tubing

### Uses and Features

- Superior resistance to highly corrosive chemicals, fuels, lubricants, acids and solvents
- Ideal for protecting wires and cables in military and aerospace applications
- Outstanding high temperature performance
- Excellent impact, abrasion and cut-through resistance
- Very flexible
- Easily marked

### Technical Data

- **Shrink ratio:** 2:1
- **Recommended Shrink Temperature:** 120°C
- **Operating Temperature Range:** -40°C to 200°C
- **Longitudinal Change:** +0 / -20%
- **Shelf Life:** 2 Years
- **Recommend Storage:** <35°
- **Standard Colors:** Black
- **Standard Packaging:** Spooled

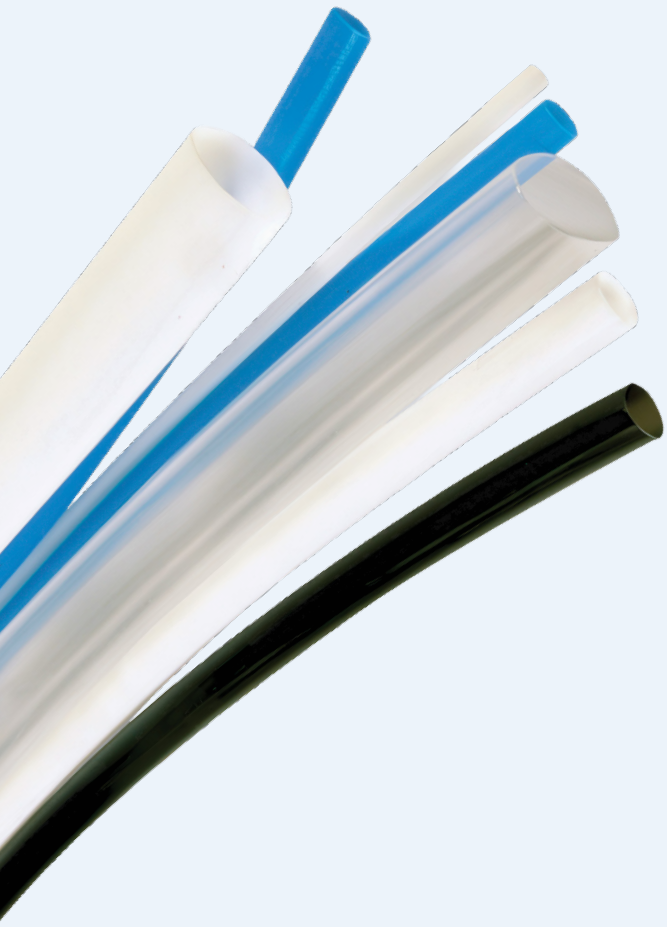
### Certifications

**SAE AS23053/13**

## Summary of Properties

| Category | Property | Units | Value |
|---|---|---|---|
| Mechanical | Specific Gravity | g/cc | 1.9 |
| | Tensile Strength | psi | 1200 |
| | Ultimate Elongation | % | 200 |
| Electrical | Volume Resistivity | ohm-cm | 1 x $10^{11}$ |
| | Dielectric Strength (min) | v/mil | 200 |

| | Minimum Expanded I.D. | | Maximum Recovered I.D. | | Recovered Wall Nominal | | Standard Packaging (per box) Product on Spools | |
|---|---|---|---|---|---|---|---|---|
| Size | in. | mm | in. | mm | in. | mm | ft. / Spool | Total ft. / Box |
| 1/8 | .125 | 3.18 | .062 | 1.57 | .030 | 0.76 | 200' | 200' |
| 3/16 | .187 | 4.75 | .093 | 2.36 | .035 | 0.89 | 200' | 200' |
| 1/4 | .250 | 6.35 | .125 | 3.18 | .035 | 0.89 | 200' | 200' |
| 3/8 | .375 | 9.53 | .187 | 4.75 | .035 | 0.89 | 200' | 200' |
| 1/2 | .500 | 12.70 | .250 | 6.35 | .035 | 0.89 | 100' | 100' |
| 5/8 | .625 | 15.88 | .312 | 7.92 | .042 | 1.07 | 100' | 100' |
| 3/4 | .750 | 19.05 | .375 | 9.53 | .042 | 1.07 | 100' | 100' |
| 7/8 | .875 | 22.23 | .438 | 11.11 | .049 | 1.24 | 100' | 100' |
| 1 | 1.000 | 25.40 | .500 | 12.70 | .049 | 1.24 | 50' | 50' |
| 1 1/4 | 1.250 | 31.75 | .625 | 15.88 | .055 | 1.40 | 50' | 50' |



## Extruded Tubing

Pexco's extruded tubing and sleeving solutions extend beyond heat shrink to provide durable, ready-to-use protection for applications where shrinkable materials are not required. Under the Insultab® brand, these non-shrink products are engineered for consistent dimensional stability, reliable insulation, and long-term performance across electrical, industrial, and medical applications. Available in standard and heavy wall constructions, these solutions offer flexibility, abrasion resistance, and dependable dielectric properties in a wide range of environments.

This portfolio includes **4900 PVC Tubing & Sleeving**, **4900 x .032 Heavy Wall PVC**, and **714 Medical Tubing**, each designed to meet specific performance and regulatory requirements. Common applications include wire insulation, fluid transfer, protective sleeving, and general-purpose covering where ease of installation and material consistency are critical. For distributors and OEMs, these products provide a complementary solution to heat shrink tubing, enabling broader application coverage and expanded product offerings.

In addition to PVC and medical-grade tubing, Pexco offers a full range of thermoplastic and fluoropolymer tubing solutions, including nylon tubing and Altaflo® fluoropolymer tubing for high-performance, chemical-resistant, and high-temperature applications. Please refer to our dedicated tubing catalogs for detailed product specifications and material selection guidance.

# 4900

## Flexible PVC Tubing

### Uses and Features

- Continuous service rated for 105°C
- Excellent general purpose flexible tubing
- Resistant to most common chemicals and oils
- Excellent UV stability
- Meets EU "Lead Free" requirements

### Certifications

- UL 224 VW-1
- CSA OFT
- Size #24 through Size #1: UL rated 300V
- Size 5/16 through Size 2": UL rated 600V
- AMS 3631
- ASTM D 922
- MIL-I-631D Grade C QPL Approved

## Summary of Properties

| Category | Property | Units | Value |
|---|---|---|---|
| Mechanical | Specific Gravity | g/cc | 1.32 |
| | Tensile Strength | psi | 2780 |
| | Ultimate Elongation | % | 260 |
| Electrical | Volume Resistivity | ohm-cm | $1.6 \times 10^{14}$ |
| | Dielectric Strength | v/mil | 870 |
| Thermal | Flammability | N/A | VW-1 |

| | Nominal I.D. | | Nominal Wall | | Standard Packaging (Per Box) — Product on Spools | |
|---|---|---|---|---|---|---|
| AWG No. | in. | mm | in. | mm | ft./Spool | Total ft./Box |
| 24 | .022 | 0.56 | .012 | 0.30 | 2,500' | 5,000' |
| 22 | .027 | 0.69 | .012 | 0.30 | 2,500' | 5,000' |
| 20 | .034 | 0.86 | .016 | 0.41 | 1,000' | 4,000' |
| 19 | .038 | 0.97 | .016 | 0.41 | 1,000' | 4,000' |
| 18 | .042 | 1.07 | .016 | 0.41 | 1,000' | 4,000' |
| 17 | .047 | 1.19 | .016 | 0.41 | 1,000' | 4,000' |
| 16 | .053 | 1.35 | .016 | 0.41 | 1,000' | 4,000' |
| 15 | .059 | 1.50 | .016 | 0.41 | 1,000' | 4,000' |
| 14 | .066 | 1.68 | .016 | 0.41 | 1,000' | 4,000' |
| 13 | .076 | 1.93 | .016 | 0.41 | 1,000' | 4,000' |
| 12 | .085 | 2.16 | .016 | 0.41 | 1,000' | 4,000' |
| 11 | .095 | 2.41 | .016 | 0.41 | 1,000' | 4,000' |
| 10 | .106 | 2.69 | .016 | 0.41 | 1,000' | 4,000' |
| 9 | .118 | 3.00 | .020 | 0.51 | 1,000' | 4,000' |
| 8 | .133 | 3.38 | .020 | 0.51 | 1,000' | 4,000' |
| 7 | .148 | 3.76 | .020 | 0.51 | 1,000' | 4,000' |
| 6 | .166 | 4.21 | .020 | 0.51 | 1,000' | 2,000' |
| 5 (3/16) | .186 | 4.72 | .020 | 0.51 | 1,000' | 2,000' |
| 4 | .208 | 5.28 | .020 | 0.51 | 1,000' | 2,000' |
| 3 | .234 | 5.94 | .020 | 0.51 | 1,000' | 2,000' |
| 1/4 | .250 | 6.35 | .020 | 0.51 | 1,000' | 2,000' |
| 2 | .263 | 6.68 | .020 | 0.51 | 1,000' | 2,000' |
| 1 | .294 | 7.47 | .020 | 0.51 | 1,000' | 2,000' |
| 5/16 | .313 | 7.94 | .025 | 0.64 | 500' | 1,000' |
| 0 | .330 | 8.38 | .025 | 0.64 | 500' | 1,000' |
| 3/8 | .375 | 9.53 | .025 | 0.64 | 500' | 1,000' |
| 7/16 | .438 | 11.11 | .025 | 0.64 | 500' | 1,000' |
| 1/2 | .500 | 12.70 | .025 | 0.64 | 500' | 1,000' |
| 9/16 | .563 | 14.29 | .030 | 0.76 | 250' | 500' |
| 5/8 | .625 | 15.88 | .030 | 0.76 | 250' | 500' |
| 3/4 | .750 | 19.05 | .035 | 0.89 | 250' | 500' |
| 7/8 | .875 | 22.23 | .035 | 0.89 | 100' | 400' |
| 1" | 1.000 | 25.40 | .035 | 0.89 | 100' | 400' |
| 1 1/8 | 1.125 | 28.58 | .035 | 0.89 | 100' | 400' |
| 1 1/4 | 1.250 | 31.75 | .040 | 1.02 | 100' | 400' |
| 1 3/8 | 1.375 | 34.93 | .045 | 1.14 | 50' | 200' |
| 1 1/2 | 1.500 | 38.10 | .045 | 1.14 | 50' | 200' |
| 1 3/4 | 1.750 | 44.45 | .055 | 1.40 | 50' | 200' |
| 2" | 2.000 | 50.80 | .060 | 1.52 | 50' | 200' |

**Standard Colors:** Black, White, Red, Yellow, Clear, Sizes above 1 inch: Black, White, Clear

# 4900 x .032

## Heavy-Wall, Flexible PVC Tubing

### Uses and Features

- General purpose flexible tubing with a 1/32" wall thickness.
- Continuous service rated for 105°C
- Resistant to most common chemicals and oils
- Excellent UV Stability
- High dielectic strength
- Meets EU "Lead Free" requirements

### Certifications

- UL 224 VW-1
- CSA OFT rated for 600V
- AMS 3631
- ASTM D 922

## Summary of Properties

| Category | Property | Units | Value |
|---|---|---|---|
| Mechanical | Specific Gravity | g/cc | 1.32 |
| | Tensile Strength | psi | 2780 |
| | Ultimate Elongation | % | 260 |
| Electrical | Volume Resistivity | ohm-cm | $1.6 \times 10^{14}$ |
| | Dielectric Strength | v/mil | 870 |
| Thermal | Flammability | N/A | VW-1 |

| | Nominal I.D. | | Nominal Wall | | Standard Packaging (Per Box) — Product on Spools | |
|---|---|---|---|---|---|---|
| AWG No. | in. | mm | in. | mm | ft./Spool | Total ft./Box |
| 24 | .022 | 0.56 | .032 | 0.81 | 1,000' | 4,000' |
| 22 | .027 | 0.69 | .032 | 0.81 | 1,000' | 4,000' |
| 20 | .034 | 0.86 | .032 | 0.81 | 1,000' | 4,000' |
| 19 | .038 | 0.97 | .032 | 0.81 | 1,000' | 4,000' |
| 18 | .042 | 1.07 | .032 | 0.81 | 1,000' | 4,000' |
| 17 | .047 | 1.19 | .032 | 0.81 | 1,000' | 4,000' |
| 16 | .053 | 1.35 | .032 | 0.81 | 1,000' | 4,000' |
| 15 | .059 | 1.50 | .032 | 0.81 | 1,000' | 4,000' |
| 14 | .066 | 1.68 | .032 | 0.81 | 1,000' | 4,000' |
| 13 | .076 | 1.93 | .032 | 0.81 | 1,000' | 4,000' |
| 12 | .085 | 2.16 | .032 | 0.81 | 1,000' | 4,000' |
| 11 | .095 | 2.41 | .032 | 0.81 | 1,000' | 4,000' |
| 10 | .106 | 2.69 | .032 | 0.81 | 1,000' | 4,000' |
| 9 | .118 | 3.00 | .032 | 0.81 | 1,000' | 4,000' |
| 8 | .133 | 3.38 | .032 | 0.81 | 500' | 1,000' |
| 7 | .148 | 3.76 | .032 | 0.81 | 500' | 1,000' |
| 6 | .166 | 4.21 | .032 | 0.81 | 500' | 1,000' |
| 5 (3/16) | .186 | 4.72 | .032 | 0.81 | 500' | 1,000' |
| 4 | .208 | 5.28 | .032 | 0.81 | 500' | 1,000' |
| 3 | .234 | 5.94 | .032 | 0.81 | 500' | 1,000' |
| 1/4 | .250 | 6.35 | .032 | 0.81 | 500' | 1,000' |
| 2 | .263 | 6.68 | .032 | 0.81 | 500' | 1,000' |
| 1 | .294 | 7.47 | .032 | 0.81 | 500' | 1,000' |
| 5/16 | .313 | 7.94 | .032 | 0.81 | 500' | 1,000' |
| 0 | .330 | 8.38 | .032 | 0.81 | 500' | 1,000' |
| 3/8 | .375 | 9.53 | .032 | 0.81 | 500' | 1,000' |
| 7/16 | .438 | 11.11 | .032 | 0.81 | 500' | 1,000' |
| 1/2 | .500 | 12.70 | .032 | 0.81 | 250' | 500' |

**Standard Colors:** Black, Clear

# HS-714

## Medical Grade, Cross-linked Acrylated Olefin Heat Shrinkable Tubing

### Uses and Features

- Manufactured using a proprietary, USP Class VI certified resin with no additives or fillers
- Offers a bio-compatible jacketing for temporary implantation devices, Ideal for insulating electro-surgical instruments
- Offers unique adhesion properties to metals, glass, and select plastics without the use of adhesive
- Displays superior cut-though, puncture, and abrasion resistance
- Provides excellent resistance to a wide range of chemicals including Saline, Povidone-iodine (Betadine), Benzalkonium (Zephiran), and Alcohol
- Can be printed with USP Class VI inks
- Comes with complete lot traceability
- Alcohol wiped and double-bagged in a clean room environment

### Technical Data

**Shrink ratio:** 2:1

**Recommended Shrink Temperature:** 121°C

**Operating Temperature Range:** -20°C to 121°C

**Longitudinal Change:** +/-5%

**Shelf Life:** 3 years

**Recommend Storage:** <27° C

**Standard Colors:** Clear, White, Black, Blue

**Standard Packaging:** Spooled

### Certifications

**USP Class VI**

**ISO-10993-5**

**USFDA Reg C.F.R 177.1330**

**RoHS Compliant**

USP Class VI and ISO 10993-5 Cytotoxicity documentation provided as post process certification when requested

# Medical Grade, Cross-linked Acrylated Olefin Heat Shrinkable Tubing

HEAT SHRINK

## Summary of Properties

| Category | Property | Units | Value |
|---|---|---|---|
| Mechanical | Specific Gravity | g/cm² | 0.934 |
| | Tensile Strength (min) | psi | 3200 |
| | Ultimate Elongation (min) | % | 500 |
| | Durometer | Shore D | 53 |
| Electrical | Dielectric Strength | v/mil | 1800 |
| | Flammability | N/A | VW-1 |

| Compatible with the following sterilization methods | |
|---|---|
| E-beam and Gamma | Steris Process — Peracetic Acid |
| Autoclave | Hydrogen Peroxide Gas |
| EtO | Glutaraldehyde |

### Autoclave Cycle Test:

**20 cycles @ 121°C 15 psig for 15 min. with fast dry cycle, followed by test for:**

| Property | Test Method | Typical Value |
|---|---|---|
| Volume Resistivity @ 500 volts | ASTM D 257 | No change from original |
| Dielectric Strength in air @ 500 kv/min rise | ASTM D 149 | No change from original |
| Dielectric Constant @ 1 MHz | ASTM D 150 | No change from original |
| Dissipation Factor @ 1 MHz | ASTM D 150 | No change from original |

**Notice to User:** It is imperative that manufacturers and end-users understand that the electro-surgical instruments should be placed separately, without overlay, on autoclave trays. Potential damage caused by overlay in the autoclave will significantly reduce this and any other dielectric insulator's ability to pass the 20 cycles of autoclave required by the AAMI.

All statements and recommendations are based on technical data that PEXCO believes to be true and reliable. It is the responsibility of the user to determine functionality and suitability. If you have any questions on the use or handling of this product, please contact us at **844-352-5777**.

### Standard Dimensions

| | Expanded I.D. Minimum | | Recovered I.D. Maximum | | Recovered Wall Nominal | | Standard Packaging (per Box) Product is Supplied in Coils or on Plastic Spools | |
|---|---|---|---|---|---|---|---|---|
| Size | in. | mm | in. | mm | in. | mm | ft. / Coil or Spool | Total ft./Box |
| 3/32 | .093 | 2.36 | .046 | 1.17 | .020 | 0.51 | 1,000′ | 2,000′ |
| 1/8 | .125 | 3.18 | .062 | 1.58 | .020 | 0.51 | 1,000′ | 2,000′ |
| 3/16 | .187 | 4.75 | .093 | 2.36 | .020 | 0.51 | 1,000′ | 2,000′ |
| 1/4 | .250 | 6.35 | .125 | 3.18 | .025 | 0.64 | 500′ | 1,000′ |
| 3/8 | .375 | 9.53 | .187 | 4.75 | .025 | 0.64 | 200′ | 600′ |
| 1/2 | .500 | 12.70 | .250 | 6.35 | .025 | 0.64 | 200′ | 600′ |

Custom sizes available upon request.

All information presented is believed to be reliable and is offered only as a guide to product selection. As each application is unique, Insultab can make no warranties as to the suitability of any products for a particular use. Specifications are subject to change.

PEXCO

# HEAT SHRINK AND TUBING

## One source for high-performance plastic components — extrusions, molding, and machining.

### Where Ideas Take Shape.

Pexco offers standard size and custom extrusions; precision injection, compression, transfer, and net shape molding; and plastic and metal machining. From acrylics to fluoropolymers, and elastomers to specialty polymers, our advanced materials processing and experienced team ensure we can meet the most demanding specifications.

### Key Markets

Pexco's Insultab heat shrink tubing provides reliable protection, insulation, sealing, and identification across a wide range of industrial and commercial applications. Within our Insultab Heat Shrink line, Pexco offers custom cutting, packing, labeling, and printing.

- Aerospace & Defense
- Electrical & Electronics
- Energy & Power Generation
- Medical & Life Sciences
- Semiconductor
- Telecom & Data Center

### Quality and Certifications

Headquartered in Atlanta, Georgia, with manufacturing plants across the United States and in Mexico and Canada, all our sites are ISO 9001 certified. We have additional ISO 13485 certifications for medical equipment, AS9100 certifications for aerospace, and SEMI F57 and SEMI C90 certifications for semiconductor applications.

UL 224 VW-1

ASTM

SAE AS23053/1/2/4/5

USP Class VI

ISO 10993 5

RoHS COMPLIANT

CSA GROUP

FDA Reg C.F.R. 177.1330


**For more information please contact us at:**

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