



Single Wall Heat Shrink Tubing

Technical Specifications

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Overview

Kable Kontrol Single Wall Heat Shrink Tubing is manufactured with high quality **Polyolefin**; a durable, lightweight polymer made from olefin monomers. This material has an operating temperature of -67°F to $+275^{\circ}\text{F}$, and a shrink temperature of 194°F . During the shrink process, lengthwise shrinks approximately 5-7%.

Kable Kontrol Single Wall Heat Shrink Tubing has high chemical and oil resistance, making it ideal for applications where such exposures are high. All colors except clear are flame retardant and only black color is UV resistant. Additionally, this product is rated for 600V.

Country of Origin: China

2:1 Single Wall Tubing – Polyolefin

SKU	Inside Diameter	Color	Sizing (ft.)
HS351	3/64"	Y Wt Bk Gr Or Gy Br Cl Bl Pr	10 50 100 500
HS352	1/16"	Y Wt Bk Gr Or Gy Br Cl Bl Rd	10 50 100 500
HS354	3/32"	Y Wt Bk Gr Or Gy Br Cl Bl Pr Rd	10 50 100 500
HS355	1/8"	Y Wt Bk Gr Or Gy Br Cl Bl Pr Rd	10 50 100 500
HS357	3/16"	Y Wt Bk Gr Or Gy Br Cl Bl Pr Rd	10 50 100 500
HS359	1/4"	Yw Wh Bk Gn Or Gy Br Cl Bl Pr Rd	10 50 100 500
HS363	3/8"	Yw Wh Bk Gn Or Gy Br Cl Bl Pr Rd	10 50 100 500
HS364	1/2"	Yw Wh Bk Gn Or Gy Br Cl Bl Pr Rd	10 50 100 500
HS358	5/8"	Yw Bk Gn Cl Rd	10 50 100 500
HS365	3/4"	Yw Wh Bk Gn Or Gy Br Cl Bl Pr Rd	10 50 100 500
HS367	1"	Yw Wh Bk Gn Cl Gy Rd Or Br Bl Pr	10 50 100 500
HS368	1-1/4"	Wh Bk Or Cl Bl Rd	10 50 100 500
HS369	1-1/2"	Yw Wh Bk Gn Or Gy Br Cl Bl Pr Rd	10 50 100 500
HS397	2"	Yw Wh Bk Gn Or Gy Cl Bl Pr Rd	10 50 100 500
HS398	3"	Yw Wh Bk Or Gy Cl Rd	10 50 100 500
HS399	4"	Bk Br Rd	10 50 100 500

3:1 Single Wall Tubing

SKU	Inside Diameter	Color	Sizing (ft)
HS3370-SP	1/16"	Bk Cl	500
HS3371-SP	1/8"	Bk Cl	500
HS3372-SP	3/16"	Bk Rd Cl	250
HS3374-SP	1/4"	Bk Wh Rd Cl	250
HS3376-SP	3/8"	Bk Yw Wh Rd Cl	200
HS3378-SP	1/2"	Bk Yw Wh Rd Cl	200
HS3380-SP	3/4"	Bk Yw Wh Rd Cl	100
HS3382-SP	1"	Bk Yw Wh Rd Cl	100
HS3385-SP	1-1/4"	Bk Rd Cl	100
HS3383-SP	1-1/2"	Bk Wh Rd Cl	100
HS3384-SP	2"	Rd Cl	100

4:1 Single Wall Tubing

SKU	Inside Diameter	Color	Sizing (ft)
HS402	1"	Bk	4
HS403	1-1/4"	Bk	4
HS404	1-1/2"	Bk	4

Inside Diameters are measured as ROUND TUBE, NOT FLAT.

Chemical Resistance

Kable Kontrol Polyolefin Heat Shrink Tubing exhibits impressive chemical resistance, making it suitable for applications in environments where exposure to chemicals is a concern. Such resistance includes acids, alkalis, and organic solvents.

However, polyolefin can be susceptible to degradation when exposed to strong oxidizing agents, halogenated solvents, and certain hydrocarbons at elevated temperatures.

Effects of Heat Aging

Kable Kontrol Polyolefin Heat Shrink Tubing is susceptible to heat aging, which can lead to degradation of their mechanical and physical properties over time.

Hydrolytic Stability and Water Absorption

Kable Kontrol Polyolefin Heat Shrink Tubing exhibits excellent hydrolytic stability due to their non-polar, hydrophobic molecular structure, which makes them highly resistant to hydrolysis and degradation in water. Water is not readily absorbed, with absorption typically below 0.01%.

UV Resistance

Kable Kontrol Polyolefin Heat Shrink Tubing is resistant to UV exposure in its **black color only**. All other colors have generally low resistance to UV exposure. Prolonged exposure to sunlight causes oxidation, leading to embrittlement, discoloration, and cracking over time.

Shelf Life & Loss of Weight with Aging

Kable Kontrol Polyolefin Heat Shrink Tubing has a shelf life of 10 years. Past the shelf life, aging affects polyolefin by gradually degrading its mechanical and chemical properties due to environmental factors such as heat, oxygen, UV radiation, and moisture. Over time, oxidation leads to chain scission, embrittlement, discoloration, and a decline in tensile strength and flexibility. UV exposure accelerates this process by breaking molecular bonds, resulting in surface cracking and chalking. Thermal aging can cause molecular rearrangements, reducing impact resistance and elasticity.

Effects of Radiation

Radiation affects **Polyolefins** by inducing chemical changes that can lead to crosslinking or degradation, depending on factors like dose and environment. At moderate radiation doses, crosslinking can enhance mechanical strength, thermal stability, and chemical resistance, making the material more durable. However, at higher doses or in the presence of oxygen, oxidative degradation can occur, leading to chain scission, embrittlement, discoloration, and loss of mechanical properties.

UV Resistance

Kable Kontrol Polyolefin Heat Shrink Tubing is resistant to UV exposure in its **black color only**. All other colors have generally low resistance to UV exposure. Prolonged exposure to sunlight causes oxidation, leading to embrittlement, discoloration, and cracking over time.

Flame Resistance

Kable Kontrol Polyolefin Heat Shrink Tubing is self extinguishing and holds flame retardant properties on all colors **except clear**.

UL Standards & Engagement

UL Standards & Engagement UL standard is a published set of best practices for manufacturing and testing the safety, security, and sustainability of a product or system, developed and voted on by experts across industries and interests.

Kable Kontrol Single Wall Heat Shrink Tubing Possess the following UL certifications:

- UL Listed, File E536025

Kable Kontrol Single Wall Heat Shrink Tubing complies with RoHS regulations.

RoHS is a European Union Regulation that restricts the use of 10 hazardous substances in electrical and electronic equipment. It aims to reduce environmental pollution and protect human health by limiting toxic materials.