



DERAY®-H - THIN WALL CROSSLINKED POLYOLEFIN

Multi-purpose, flame retardant, flexible heat shrink tubing

FEATURES AND BENEFITS

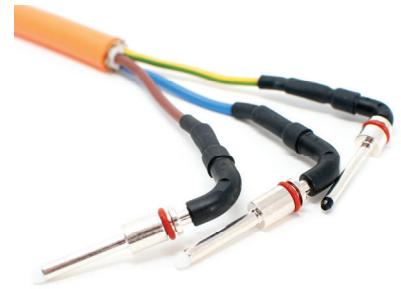
- Self-extinguishing (colors only)
- Flexible
- Suitable for various applications
- Good resistance to common fluids and solvents
- High dielectric strength
- Shrink ratio: 2:1
- Continuous operating temperature: -55°C to 135°C
- Shrink temperature: 110°C min.

STANDARDS

- UL file # E107857 (colors only)
- CSA file # 066150_0_000 (colors only)
- Approved to major automotive OEM specifications

TYPICAL APPLICATIONS

- Abrasion and mechanical protection
- Cable insulation, marking and bundling of electrical or mechanical components
- Strain relief
- Corrosion protection



2:1

SHRINK RATIO

-55°C to 135°C

(-67°F to 275°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Automotive, Industrial

STANDARDS:



Thin wall crosslinked polyolefin

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED				DELIVERY UNITS				
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		Spool*		Mini-Spool		Lengths
	MM	IN	MM	IN	MM	IN	M	FT	M	FT	1.22 M / 48 IN
0047	1.2	3/64	0.6	0.024	0.40	0.016	300	984	150	492	25
0063	1.6	1/16	0.8	0.031	0.40	0.016	300	984	150	492	25
0094	2.4	3/32	1.2	0.047	0.50	0.020	300	984	150	492	25
0125	3.2	1/8	1.6	0.063	0.50	0.020	300	984	150	492	25
0187	4.8	3/16	2.4	0.094	0.50	0.020	300	984	75	246	25
0250	6.4	1/4	3.2	0.126	0.60	0.024	300	984	75	246	25
0375	9.5	3/8	4.8	0.189	0.60	0.024	150	492	75	246	25
0500	12.7	1/2	6.4	0.252	0.60	0.024	100	328	50	164	25
0625	16.0	5/8	8.0	0.315	0.60	0.024	100	328	50	164	10
0750	19.0	3/4	9.5	0.374	0.80	0.031	50	164	30	98	10
1000	25.4	1	12.7	0.500	0.90	0.035	50	164	30	98	10
1250	31.8	1 1/4	15.9	0.626	0.90	0.035	50	164	30	98	-
1500	38.0	1 1/2	19.0	0.748	1.00	0.039	50	164	30	98	-
2000	51.0	2	25.4	1.000	1.10	0.043	50	164	30	98	-
3000	76.0	3	38.0	1.496	1.30	0.051	25	82	15	49	-
4000	101.6	4	50.8	2.000	1.40	0.055	25	82	15	49	-

Clear items not UL or CSA listed.

*Delivery unit *spool* only available for black items



ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
 - Color: Black (BK), red (RD), white (WT), clear (CL), blue (BL), yellow (YL), green (GR), brown (BN), grey (GY)
- Please specify the product name, order number and options you require
- Example:* DERAY®-H, 0250 or 1/4 in, black

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

FOR FURTHER INFORMATION, PLEASE CONTACT:

Americas: 800 422 6872

Canada: 800 845 6808

Asia Pacific: +86 512 82280099

Europe: +49 2226 9047 355

We advise that customers should separately evaluate the suitability of our products for their particular application. Our responsibilities are only those listed in our Standard Terms and Conditions of Sale for these products. Please ask for the latest version of this data sheet. Subject to modification without prior notice.

Thin wall crosslinked polyolefin

TECHNICAL DATA

TECHNICAL DATA	CURRENT VALUES	TEST METHODS
Material		
Material	PE, modified; free of lead, silicone and cadmium	n/a
Surface	matt	n/a
Specific gravity	1.3 g/cm ³ max.	ASTM-D 792, A-I
Shrink ratio	2:1	n/a
Longitudinal shrinkage	-10% max.	ASTM-D 2671
Mechanical		
Tensile strength	15 MPa	IEC 60684-2
Elongation	450%	IEC 60684-2
Secant modulus	175 MPa max.	ASTM-D 882
Thermal		
Tensile strength after thermal ageing (168 h at 158°C)	12 MPa	UL 224
Elongation after thermal ageing (168 h at 158°C)	300%	UL 224
Tensile strength after thermal shock (4 h at 200°C)	13 MPa	IEC 811-1-2
Elongation after thermal shock (4 h at 200°C)	400%	IEC 811-1-2
Cold bend test	does not break at -55°C	ASTM-D 2671 Meth. C
Combustion behaviour	flame retardant	UL 224
Shrink temperature	110°C min.	n/a
Storage temperature	50°C max.	n/a
Continuous operating temperature	-55°C to 135°C	IEC 216
Chemical		
Corrosive action	non-corrosive	ASTM-D 2671 Meth. A
Compatibility with copper	non-corrosive	ASTM-D 2671 Meth. B
Resistance against chemicals	good	n/a
Water absorption	0.15% max.	VDE 0473
Electrical		
Dielectric strength	24 kV/mm	VDE 0303 Part 2
Spec. volume resistivity	10 ¹⁵ Ω x cm	VDE 0303 Part 3
Insulation class	E	VDE 0530

FOR FURTHER INFORMATION, PLEASE CONTACT:

Americas: 800 422 6872 Canada: 800 845 6808 Asia Pacific: +86 512 82280099 Europe: +49 2226 9047 355

We advise that customers should separately evaluate the suitability of our products for their particular application. Our responsibilities are only those listed in our Standard Terms and Conditions of Sale for these products. Please ask for the latest version of this data sheet. Subject to modification without prior notice.

Thin wall crosslinked polyolefin

TECHNICAL DATA

TECHNICAL DATA	CURRENT VALUES	TEST METHODS
Material		
Material	PE, modified, free of lead, silicone, halogen and cadmium	n/a
Surface	semi glossy	n/a
Specific gravity	1.0 g/cm ³ max.	ASTM-D 792, A-I
Shrink ratio	2:1	n/a
Longitudinal shrinkage	-6% max.	ASTM-D 2671
Mechanical		
Tensile strength	19 MPa	IEC 60684-2
Elongation	530%	IEC 60684-2
Secant modulus	175 MPa max.	ASTM-D 882
Thermal		
Tensile strength after thermal ageing (168 h at 158°C)	18 MPa	UL 224
Elongation after thermal ageing (168 h at 158°C)	490%	UL 224
Tensile strength after thermal shock (4 h at 200°C)	18 MPa	IEC 811-1-2
Elongation after thermal shock (4 h at 200°C)	500%	IEC 811-1-2
Cold bend test	does not break at -55°C	ASTM-D 2671 Meth. C
Combustion behaviour	passed	FMVSS 302
Shrink temperature	110°C min.	n/a
Storage temperature	40°C max.	n/a
Continuous operating temperature	-55°C to 135°C	IEC 216
Chemical		
Corrosive action	non-corrosive	ASTM-D 2671 Meth. A
Compatibility with copper	non-corrosive	ASTM-D 2671 Meth. B
Resistance against chemicals	good	n/a
Water absorption	0.3% max.	VDE 0473
Electrical		
Dielectric strength	26 kV/mm	VDE 0303 Part 2
Spec. volume resistivity	10 ¹⁵ Ω x cm	VDE 0303 Part 3

FOR FURTHER INFORMATION, PLEASE CONTACT:

Americas: 800 422 6872 Canada: 800 845 6808 Asia Pacific: +86 512 82280099 Europe: +49 2226 9047 355

We advise that customers should separately evaluate the suitability of our products for their particular application. Our responsibilities are only those listed in our Standard Terms and Conditions of Sale for these products. Please ask for the latest version of this data sheet. Subject to modification without prior notice.