

DURALECTRIC™
High-performance jacketing material

Outstanding durability and insulation performance



DURALECTRIC™



Rugged high-temperature, environmental Duralectric™ jacketing is available in a broad range of and colors including safety orange

Duralectric™ is the high-performance jacketing material perfectly suited for immersion, chemical or caustic fluid exposure, temperature extremes, UV radiation and more

Glenair Duralectric™ weatherproof jacketing is halogen free, flame resistant, and functional to 260°C. Duralectric™ far surpasses the accelerated solar weathering standards under IEC 60068-2-5, and is tested to 56 accelerated days, equivalent to 53 years of solar exposure. Glenair can supply the material in a variety of formats, including blown jacketing, as an extrusion over wire and cable, as an overmolding compound and as a self-vulcanizing repair tape.

Jacketing Options		
0	Black	Weatherproof, halogen free, flame resistant, functional to 260°C
1	Desert Tan	Fed Std #33446 Desert Tan color
2	Red	Pantone® 1797 U
3	Orange	OSHA Safety Orange to mark energized electrical cables
4	Yellow	Pantone® Yellow U
5	Green	Pantone® 355 U
6	Blue	Pantone® 3005 U
7	Violet	Fed Std 595; #37100
8	Gray	Qualified to US Navy MIL-PRF-24758A, Fed Std 595B #26270 Haze Gray color
9	White	Fed Std 595; #37875

Glenair Duralectric™ Material Specifications	
Temperature rating: -60°C to +260°C (with excursions to 290°C)	
Halogen free per IEC 60614-1. Less than 5mg of hcl per 1 gm of product tested.	
Accelerated Weathering (Solar) per IEC 60068-2-5; 56 days exposure	
Flame Resistant per IEC 60614-1; Material does not sustain combustion when the source of flame is removed.	
Low Smoke Index per NES 711 (11.75); Minimum standard is 25. The Glenair tested level is 11.75. This makes the material acceptable for interior applications as well as topside.	
Smoke Density Class F1 Per NF F 16-101 IAW DIN EN 60695-2-11:2001	
Toxicity Index per NES 713 (1.9); Minimum standard is 5. The Glenair tested level is 1.9. This makes the material acceptable for interior applications as well as topside.	
Colorable to Fed Std 595B	
Markable IAW MIL-PRF-24758A	
Oxygen Limiting Index = 45.1 Per EN ISO 4589-2:1999; Minimum is 28.	
ASTME E 595 vacuum outgassing–post bake results: TML .06%, CVM .006%, WVR .02%	
Fungus resistance testing (rating of 0) per MIL-STD-810F, method 508.5	
ASTM D624 DIE B tear test: 150 KN/M	
12 Sec Vertical Burn: (Pass) Per 14CFR Part 25.853(a) amdt 25-116 App F Part 1 (a)(1)(ii)	
Fluids Per MIL STD 810F, Method 504	Cleaner (MIL-C-85570): CALLA-855
Fuel (MIL-T-83133): JPG	Solvent (Isopropyl Alcohol): TT-I-735
Fuel (MIL-T-83133): JPG	De Icer (AMS-1432): E36 Runway Deicer
Hydraulic Fluid (MIL H 5606): ROYCO 756	Coolant (MIL-C-87252): Coolanol 25R
Lube Oil (MIL-L-23699): ROYCO-500	Fire Extinguishant Foam: AMEREX AFFF

Jacketing Material Properties	
Material Property	Duralectric™
Temperature Range	-60°C to +260°C
Specific Gravity	1.22
Weight: Lbs./Cubic Inch	.045
Abrasion Resistance	Good
Wear Resistance	Good
Flame Resistance	Excellent
Sunlight Resistance	Excellent

Chemical Resistance	
Aliphatic Hydrocarbons	Excellent
Aromatic Hydrocarbons	Excellent
Ketones, Etc.	Excellent
Oil & Gasoline	Excellent

HIGH-PERFORMANCE
Cable and conduit jacketing

Neoprene • Hypalon® • EPDM • Viton



- Extruded, blown-on and heat shrink jacketing for harsh application environments
- General purpose polyurethane
- Chemically-resistant Viton®
- Industry standard neoprene
- Selected materials CBRN tested

Cable and conduit jacketing materials purpose-designed for every application requirement: Immersion, chemical or caustic fluid exposure, temperature extremes, UV radiation and more



Jacketing Options		
N	Neoprene	Tough, durable polychloroprene for mechanical and environmental protection
H	Hypalon®	Light weight with broad temperature range
E	EPDM	Better resistance to Ketones
V	Viton®	Heaviest material with best resistance to oil and gasoline

Jacketing Material Properties and Chemical Resistance				
Material Property	EPDM (Ethylene Propylene Diene Monomer)	Hypalon (Chlorosulfonated Polyethylene)	Neoprene (Polychloroprene)	Viton® (Fluoroelastomer)
Temperature Range	-60°F to +300°F (-51°C to +149°C)	-60°F to +300°F (-51°C to +149°C)	-60°F to +250°F (-51°C to +121°C)	-40°F to +392°F (-40°C to +200°C)
Specific Gravity	1.26	1.18	1.25	1.80
Weight: Lbs./Cubic Inch	.045	.043	.045	.055
Abrasion Resistance	Excellent	Excellent	Excellent	Excellent
Wear Resistance	Good	Good	Good	Good
Flame Resistance	Good	Good	Good	Good
Sunlight Resistance	Good	Excellent	Excellent	Excellent
Chemical Resistance				
Aliphatic Hydrocarbons	Good	Good	Good	Excellent
Aromatic Hydrocarbons	Good	Fair	Fair	Excellent
Ketones, Etc.	Good	Poor	Poor	Poor
Oil & Gasoline	Good	Good	Good	Excellent



SELF-VULCANIZING SEALING TAPE

GLENAIR PART NO.
687-758



Duralectric™ material sealing tape designed for temporary repair of cable and conduit. Glenair Master Seal effectively stops water incursion until a permanent repair can be made.