



SERIES 77  
Heat Shrink Boots



Compound Material Performance Specifications  
Type 2 Material: 2010 Limited Fire Hazard

**A**

**GTS 4063: Heat-Shrinkable, Semi-Rigid, Limited Fire Hazard, Polyolefin**  
Temperature Range: -40°C to 130°C

This Quality Assurance Specification establishes the quality standard for a heat-shrinkable limited fire hazard compound used to manufacture Glenair® molded components. All testing to be carried out on molded sheets 2mm thick unless otherwise specified. For system tests size S06 boots with 25mm aluminum backshells and 10mm ZHTM (Raychem) jacketed cable shall be used. Systems testing shall use W1 adhesive.

Installation Temperature: Minimum 120°C, Recovered 150°C

Compound 2010 Type 2 - Materials Specification		
Test	Test Procedure	Test Requirement
Visual Examination		Homogenous and essentially free from pinholes, bubbles, flaws, cracks and inclusions, color is black
Tensile Strength	IEC 62329-2	8 Mpa minimum
Ultimate Elongation	IEC 62329-2	250 % minimum
2% Secant Modulus	IEC 62329-2	50 – 130MPa
Specific Gravity	IEC 62329-2	1.4 Max
Heat Shock 4hrs at 200°C	IEC 62329-2	No dripping or flow Tensile Strength 5 MPa minimum Ultimate Elongation 150% minimum
Heat Aging 168hrs at 175°C	IEC 62329-2	Tensile Strength 5 MPa minimum Ultimate Elongation 150 % minimum
Long Term Heat Aging 3000hrs @ 130°C	IEC 62329-2	Ultimate Elongation at break 100 % min
Low Temperature Flex -40°C 20mm mandrel	IEC 62329-2	No Cracking
Water Absorption 24hrs at 23°C	IEC 62329	0.5% maximum
Flammability	EN 62329-2	Time of burning < 15secs Length of burning < 25mm
Electric Strength	EN 62329-2	15 MV/m minimum
Volume Resistivity After Damp Heat	EN 62329-2	10 <sup>12</sup> ohms cms minimum
Copper Mirror Corrosion	EN 62329-2	No corrosion
Fungus Resistance	EN 62329-2	Tensile strength 7 MPa min Elongation at break 200% min
Oxygen Index	IEC 62329-2	> 30%
Temperature Index	IEC 62329-2	>250°C
Smoke Index	IEC-62329-2	< 20
Toxicity Index	IEC 62329-2	<3 per 100grams



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<b>Compound 2010 Type 2 - Materials Specification</b>		
<b>Test</b>	<b>Test Procedure</b>	<b>Test Requirement</b>
Acid Gas Generation	IEC 62329-2	PH min 4.3; conductivity <10.5S
Halogen Content	IEC 62329-2	<0.2%
Fluid Resistance 24 hrs immersion @ 23°C : Lubricating Oil 0-156 Lubricating Oil 0-149 Hydraulic Fluid H-520 Damping Fluid S-1720 Hydraulic Fluid Skydrol H580 Antifreeze Ethylene Glycol/Water Turbine Fuel F-34 Automotive Gasoline F-67 Isopropyl Alcohol Methyl Ethyl Ketone 1	IEC 62329-2	Tensile Strength 5 MPa minimum Ultimate Elongation 150% minimum
Dimensional Stability 14 days at 40°C	EN 62329-2	Measured dimensional values both expanded and recovered in specification
Dynamic Shear Room Temperature 105°C	EN 62329-2	>300 N 10mm cable >30 N 10mm cable
Static Load Room Temperature 4hrs 10kgs 105°C 4hrs 0.5kgs	EN 62329-2	<15mm movement 10mm cable <15mm movement 10mm cable
Peel Adhesion Boot to Adaptor Boot to Cable	IEC 62329-2	>60N/25mm >60N/25mm

**Material qualified to: VG95343 part 28 and 29, AS5258 Material G, NAVSEA 5617649 and IEC 62329-3-101**