



Halguard® E 59002

Teknor Apex Company - Polyolefin

General Information

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Latin America • North America	
Features	• Electrically Insulating • Filled • Flame Retardant	• Good Electrical Properties • Halogen Free • Low Smoke Emission	• Sunlight Resistant (720 hours) • UV Stabilized
Uses	• LSZH Insulation	• LSZH Jacketing	
Agency Ratings	• UL 94	• UL AATJ2	
Regulatory Statement	• Due to the frequent updates to regulations, specifically, California Proposition 65, EU REACH SVHCs, and RoHS, please contact Teknor Apex for the most up to date compliance statement, or refer to section 15 of the product SDS.		
Appearance	• Black	• Colors Available	• Natural Color
Forms	• Pellets		
Processing Method	• Wire & Cable Extrusion		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.13		ASTM D792
Melt Mass-Flow Rate (MFR) (200°C/10.0 kg)	8.8	g/10 min	ASTM D1238
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	1530	psi	ASTM D638
Tensile Elongation (Break)	530	%	ASTM D638
Flexural Modulus	16100	psi	ASTM D790
Elastomers	Nominal Value	Unit	Test Method
Tear Strength ²	218	lbf/in	ASTM D624
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore A, 15 sec, Operating Stand)	85		ASTM D2240
Thermal	Nominal Value	Unit	Test Method
Continuous Use Temperature	221	°F	ASTM D794
Brittleness Temperature	-36.4	°F	ASTM D746
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity			ASTM D257
73°F	4.5E+14	ohms·cm	
122°F	4.3E+13	ohms·cm	
Dielectric Constant (1 MHz)	2.92		ASTM D150
Dissipation Factor (1 MHz)	9.3E-3		ASTM D150
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	V-0		UL 94
Oxygen Index	33	%	ASTM D2863

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Additional Information

Acid Gas Emission:

- Halogen Acid Gas Content, % : <0.5% IEC 60754-1
- pH : 8.4IEC 60754-2
- Conductivity, µS/mm: 24.6 IEC60754-2

Sunlight Resistance (Exposed for 720 hours in a Twin Carbon Arc Weatherometer)..... UL1581

- Retention of Tensile Strength (%): 91%
- Retention of Elongation at Break (%): 96%

Properties Determined from Wire (Tested from 18 AWG wire with 0.016" (0.406 mm) thick insulation)

VW-1 Vertical Flame Test: Pass UL1581

Cable Flame Test: Pass UL1581

Smoke Density, % optical transmission: 66% IEC 61034

Deformation at 150°C, % : 0% UL1581

Short-Term Insulation Resistance in Water at 15°C, G?-m: 23.5 UL62

Heat Shock at 150°C: Pass UL62

Cold Bend at -40°C: Pass UL62

Data Sheet Applies to Colors Listed Below:

Natural (1132400)

Black 1 (1135036)

11/19-lc

04/2025-dmm

Processing Information

Extrusion

Nominal Value Unit

Melt Temperature	401 °F
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Notes

¹ Typical properties: these are not to be construed as specifications.

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