



HFFR 2005

Teknor Apex Company - Polyolefin

General Information

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Flame Retardant		
Features	• Flame Retardant	• Halogen Free	
Uses	• Communication Wire Jacketing	• Electronic Cable Jacketing	• Security Cable Jacketing
Agency Ratings	• ICEA Unspecified Rating	• IEC Unspecified Rating	• UL QMTM2
RoHS Compliance	• RoHS Compliant		
Appearance	• Opaque		
Forms	• Pellets		
Processing Method	• Extrusion		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.49		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/10.0 kg)	1.5	g/10 min	ASTM D1238
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	2070	psi	ASTM D638
Tensile Elongation (Break)	140	%	ASTM D638
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D, 10 sec)	53		ASTM D2240
Thermal	Nominal Value	Unit	Test Method
Brittleness Temperature	-40.0	°F	ASTM D746
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	9.7E+14	ohms·cm	ASTM D257
Dielectric Constant (1 kHz)	3.66		ASTM D150
Dissipation Factor (1 kHz)	2.0E-3		ASTM D150
Flammability	Nominal Value	Unit	Test Method
Oxygen Index	44	%	ASTM D2863

Additional Information

Ultimate Elongation Retained, UL 1581, Oven Aged, 7 days, 100°C: 78 %
 Tensile Strength Retained, UL 1581, Oven Aged, 7 days, 100°C: 113 %
 Ultimate Elongation Retained, UL 1581, Oven Aged, 7 days, 113°C: 74 %
 Tensile Strength Retained, UL 1581, Oven Aged, 7 days, 113°C: 108 %
 Ultimate Elongation Retained, UL 1581, Oven Aged, 7 days, 125°C: 73 %
 Tensile Strength Retained, UL 1581, Oven Aged, 7 days, 125°C: 116 %
 Ultimate Elongation Retained, UL 1581, Oven Aged, 7 days, 136°C: 72 %
 Tensile Strength Retained, UL 1581, Oven Aged, 7 days, 136°C: 109 %
 Acid Gas, MIL-C-24643: <5.0 mg
 Acidity of Gases, IEC-754-2: <6.0 pH
 Conductivity: <2.0 µS/cm
 Smoke Index, NES-711: <10.0
 Toxicity Index, NES-713: <1.0
 Cone Calorimeter @ 50 kW/m², Peak Heat Release Rate: 154 kW/m²
 Cone Calorimeter @ 50 kW/m², Total Heat Released: 157 MJ/m²
 Cone Calorimeter @ 50 kW/m², Peak Smoke: 0.8 l/m
 Cone Calorimeter @ 50 kW/m², Time to Sustained Ignition: 138 sec