EnviraLine™

Photo Opaque PVC with Hytrel® Liner

EXCELLENT FLEXIBILITY · NO PLASTICIZERS · SUPERIOR DIELECTRIC PROPERTIES · CUSTOM BONDING ALSO AVAILABLE

ENVIRALINE™ PHOTO OPAQUE PVC WITH HYTREL™ LINER

EnviraLine™ composite tubing is commonly used for the conveyance of a wide variety of gases, including refrigerants and hydrocarbons. It has a unique co-extruded construction, incorporating a highly inert Hytrel® liner that exhibits excellent dielectric properties as well as superior barrier performance to nonpolar materials, even at elevated temperatures. Because Hytrel® has no plasticizers it does not outgas. The product's outer shell is comprised of a DEHP Free, permeable, photo opaque, black vinyl, allowing it to be repeatedly autoclaved without separation of the two materials. Because no ingredients contain Phthalates, EnviraLine™ meets REACH compliance. EnviraLine™ is also widely used in the welding industry for ground wire applications because of its dielectric properties. With a high temperature liner, EnviraLine™ is also ideal for beverage vending applications. EnviraLine™ can be provided on a customized basis with a white vinyl outer shell for hygienic aesthetics.

AVAILABLE COLORS

- Black

APPLICATIONS

- Welding Gases TIG/MIG/MAP
- Propane and Natural Gas
- Environmental Monitoring Equipment (air)
- Refrigerant Gases
- Hydrocarbons
- Ground Wires

BENEFITS

- High Purity Liner/High Temperature
- Extremely Low Gas and Moisture Permeability
- No Plasticizers
- Excellent Flexibility

CHARACTERISTICS

- Made from FDA-approved compounds
- Made completely from RoHs and REACH compliant
- Hytrel® core resists high temperatures and oils, making it ideal for hot beverage vending machine applications
- Low permeability to refrigerant gases and hydrocarbons
- Odorless, tasteless, and inert
- Low adherence of particulates - ideal for air sampling applications
- Good weatherability properties-resists UV, ozone, gases, moisture, and temperatures

TECHFLEX® Extruded Tubing Products

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SIZING CHART

Part Number	ID	OD	Wall	Std. Length
TT-PVH0.125-0.220BK	.125″	.220″	.048″	100′ / 500′ / 1000′
TT-PVH0.170-0.250BK	.170″	.250″	.040″	100′ / 500′ / 1000′
TT-PVH0.170-0.314BK	.170″	.314″	.072″	100′ / 500′ / 1000′
TT-PVH0.187-0.275BK	.188″	.275″	.044″	100′ / 500′ / 1000′
TT-PVH0.250-0.375BK	.250″	.375″	.063″	100′ / 500‘
TT-PVH0.250-0.437BK	.250″	.438″	.094″	100′ / 500‘
TT-PVH0.280-0.468BK	.280″	.469″	.094″	100′ / 500‘
TT-PVH0.375-0.500BK	.375″	.500″	.063″	100′ / 500‘
TT-PVH0.500-0.625BK	.500″	.625″	.063″	100′ / 500‘
TT-PVH0.500-0.687BK	.500″	.688″	.093″	100′ / 500‘
TT-PVH0.500-0.750BK	.500″	.750″	.063″	100′ / 500‘

*Contact your account representative for custom sizes and colors.

STERILIZATION

- Ethylene Oxide (ETO)
- Autoclave
- Gamma

PACKAGING

- Continuous Coils
- Pre-Cut Lengths
- Crimped Ends

CERTIFICATIONS

- CFR Title 21 Section 177.1590
- CFR Title 21 Section 177.2600
- Photo Opaque FDA and NSF SI Compliant

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PHYSICAL PROPERTIES

Material Properties	Hytrel - Inner Liner Value (Test Method)	Black Vinyl - Outer Shell Value (Test Method)
MECHANICAL**		
Hardness	55 Shore D (ISO 868)	80 Shore A
Tensile Strenght	6000psi (ISO 527)	2000
Strain at Break	500% (ISO 527)	360%
Flexural Modulus (73°F)	26000psi (ISO 178)	
THERMAL**		
Brittle Temp	<-148°F (ISO 974)	-25.6°F
Deflection Temperature (0.45Mpa)	160°F (ISO 75f)	160°F
ELECTRICAL**		
Surface Resistivity	>1E15ohms (IEC 60093)	
Volume Resistivity	4E11ohms*m (IEC 60093)	
Dissipation Factor (1E2 Hz)	90E-4 (IEC 60250)	
Dissipation Factor (1E6 Hz)	375E-4 (IEC 60250)	
Electric Strength	19kV/mm (IEC 60243-1)	
CTI	>600V (IEC 60112)	
FLAMMABILITY**		
Classification (1.5mm)	HB (IEC 60695-11-10)	
Classification (1.5mm)	HB (UL 94)	
Classification (1.0mm)		V-0 (UL 94)
Oxygen Index	20% (ISO 4589-1/-2)	
High Amp Arc Ignition Resistance (3.0mm)	>200 arcs (UL 746A)	
Hot Wire Ignition (3.0mm)	31s (UL 746A)	
OTHER**		
Specific Gravity	1.2	1.35
Sunlight Resistance		720 hours

**Unless otherwise indicated, the values listed are the typical properties of the material used in manufacture and are intended only for use as a guide. Actual values for application should be determined through field testing.

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