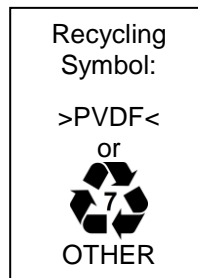
 TYPICAL MATERIAL PROPERTIES	PVDF Polyvinylidene Fluoride Copolymer Natural	SPECIFICATION NUMBER MTS1205CSU		
		Issued By: LG 06/28/19	REVISION Level:...01 Date:...06/28/19 By:...LG ECN#:...015256	Page 1 Of 2

DESCRIPTION

This is a fluorinated thermoplastic copolymer. Outstanding characteristics: chemical resistance, imperviousness to UV, high barrier properties, high purity and high temperature resistance properties.

Commercial Name: PVDF
Catalog Code: PVDF
Chemical Name: Polyvinylidene Fluoride
Used On: Cable ties



GENERAL PERFORMANCE CHARACTERISTICS

Heat Resistance Very Good
Impact Resistance Good
Moisture Sensitivity Low
UV Resistance Excellent
Flame Spread Very Low
Smoke Generation Low

PERFORMANCE ADDITIVES

Glass None
Mineral None
Carbon None
Halogens Fluorine is part of base material
 No chlorine is used

CONDITIONING None: PVDF absorbs ≤0.1% moisture in a 24-hour period

CHEMICAL RESISTANCE


Acids Excellent
Bases Excellent
Solvents Excellent
Gasoline Excellent
Oil Excellent
Salt Water Excellent

MAJOR TOXIC ELEMENTS

Under normal temperature this material is inert. However, when melting temperature (300 to 350°C) are encountered hydrogen fluoride gases or fumes are emitted which are considered toxic and harmful.

APPROVALS

None

 TYPICAL MATERIAL PROPERTIES	PVDF Polyvinylidene Fluoride Copolymer Natural	SPECIFICATION NUMBER MTS1205CSU		
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PROPERTIES CHART

	Dry	Units	Test Method
FLAMMABILITY			
UL Flammability, 1.5 mm	V-0	-	UL 94
Oxygen Index	43	%	ISO 4589-2
PHYSICAL			
Specific Gravity	1.77 – 1.80	- (1)	ASTM D792
Melt Volume-Flow Rate (MVR) 232°C/3.8 kg	15	cm ³ /10 min	ISO 1133
MECHANICAL			
Tensile Modulus	1300 (188549)	MPa (psi)	ISO 527-2
Tensile Stress at Yield	40 (5802)	MPa (psi)	ISO 527-2
Tensile Strain at Yield	10	%	ISO 527-2
Nominal Tensile Strain at Break	>50	%	ISO 527-2
Charpy Notched Impact Strength, 23°C	8 (3.8)	KJ/m ² (ft-lb/in ²)	ISO179/1eA
THERMAL			
Continuous Operating Temp	-40 to 140 (-40 to 284)	°C (°F)	UL 746
Heat Deflection Temperature 1.8 MPa, Unannealed	46 (115)	°C (°F)	ISO 75-2/A
Glass Transition Temperature	-40 (-40)	°C (°F)	ISO 11357-2
Melting Temperature	157 (315)	°C (°F)	ISO 11357-3

(1) Quantity is unit less. Use g/cm³ to convert to density units.

This document is intended as a general guide, in the material selection for a product, but does not guarantee satisfactory performance. All materials selected must be thoroughly tested in its intended application to determine its suitability. Consult a HellermannTyton representative for assistance in the final material selection.

The information contained herein is believed to be accurate at the time of printing. However, this information has been obtained from a variety of sources and has not been independently verified by HellermannTyton Corporation; therefore, we cannot warrant fitness for a particular application. Furthermore, HellermannTyton Corporation reserves the right to make changes to this document, at any time, without notice to our customers.