## **TUFflex Premium Plus Handwrap** 10.2 Micron / 40 Gauge / 0.40 Mil

Not intended as limiting specifications.

CHARACTERISTICS

### VALUES

Manufacturing Process Thickness (nominal) Color Film Width (inches) Length (feet) Net Weight / Roll (lb, nominal) Core I.D. Cast 10.2 Micron / 40 Gauge / 0.40 Mil Clear 16" 2000' 20.4 lb 3"

TESTS	METHODS	VALUES
Tensile Strength at Break (MD)	ASTM D882	6000 psi
Tensile Strength at Break (TD)	ASTM D882	2900 psi
Elongation at Break (MD)	ASTM D882	140%
Elongation at Break (TD)	ASTM D882	390%
Elemdorf Tear Strength (MD)	ASTM D1922	33 g
Elemdorf Tear Strength (TD)	ASTM D1922	316 g
Puncture, lbs	Internal	7
Dart Impact F50, g	ASTM D1709A	60



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## **TUFflex Premium Plus Handwrap** 11.9 Micron / 47 Gauge / 0.47 Mil

Not intended as limiting specifications.

CHARACTERISTICS	VALUES	
Manufacturing Process Thickness (nominal) Color Film Width (inches) Length (feet) Net Weight / Roll (lb, nominal) Roll Diameter (O.D., inches) Core I.D.	Cast 11.9 Micron / 47 Gauge / 0. Clear 16" 1500' 4.51 lb 6" 3"	.47 Mil
TESTS	METHODS	VALUES
Haze Gloss Tensile Strength at Break (MD) Tensile Strength at Break (TD) Elongation at Break (MD) Elongation at Break (TD) Elemdorf Tear Strength (MD) Elemdorf Tear Strength (TD) Cling	ASTM D1003 ASTM D2457 ASTM D882 ASTM D882 ASTM D882 ASTM D882 ASTM D1922 ASTM D1922 ASTM D5458	1.5% 82% 7600 psi 4000 psi 240% 780% 80 g 325 g 75 g



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## **TUFflex Premium Plus Handwrap** 11.9 Micron / 47 Gauge / 0.47 Mil

Not intended as limiting specifications.

CHARACTERISTICS

### VALUES Cast

Clear

1500'

20.32 lb 3"

18"

11.9 Micron / 47 Gauge / 0.47 Mil

Manufacturing Process Thickness (nominal) Color Film Width (inches) Length (feet) Net Weight / Roll (lb, nominal) Core I.D.

TESTS	METHODS	VALUES
Tensile Strength at Break (MD)	ASTM D882	6000 psi
Tensile Strength at Break (TD)	ASTM D882	2900 psi
Elongation at Break (MD)	ASTM D882	180%
Elongation at Break (TD)	ASTM D882	470%
Elemdorf Tear Strength (MD)	ASTM D1922	40 g
Elemdorf Tear Strength (TD)	ASTM D1922	380 g
Puncture, lbs	Internal	9
Dart Impact F50, g	ASTM D1709A	70



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## **TUFflex Premium Plus Handwrap** 14.5 Micron / 57 Gauge / 0.57 Mil

Not intended as limiting specifications.

CHARACTERISTICS

### VALUES

Manufacturing Process Thickness (nominal) Film Width (inches) Length (feet) Net Weight / Roll (lb, nominal) Roll Diameter (O.D., inches) Core I.D. Blown 14.5 Micron / 57 Gauge / 0.57 Mil 18" 1500' 6.15 lb 4.9" 3"

TESTS	METHODS	VALUES
Ultimate Tensile MD (psi)	ASTM D 882	7000 psi
Ultimate Tensile TD (psi)	ASTM D 882	4900 psi
Elongation MD (%)	ASTM D 882	450%
Elongation TD (%)	ASTM D 882	600%
Tear Resistance MD (grams)	ASTM D 1922	160 g/mil
Tear Resistance TD (grams)	ASTM D 1922	750 g/mil
Puncture Resistance (in-lbs.)	ASTM D 4649	14.3 in-lbs
Ultimate Prestretch (%)	Mfg. / Highlight	N/A
Cling (in to out, grams)	Mfg. method 1	150 g/in



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## **TUFflex Premium Plus Handwrap** 11.9 Micron / 47 Gauge / 0.47 Mil

Not intended as limiting specifications.

CHARACTERISTICS

### VALUES

Manufacturing ProcessCastThickness (nominal)11.9 Micron / 47 Gauge / 0.47 MilColorClearFilm Width (inches)16"Length (feet)2000'Net Weight / Roll (lb, nominal)6 lbCore I.D.3"

TESTS	METHODS	VALUES
Tensile Strength at Break (MD)	ASTM D882	6000 psi
Tensile Strength at Break (TD)	ASTM D882	2900 psi
Elongation at Break (MD)	ASTM D882	180%
Elongation at Break (TD)	ASTM D882	470%
Elemdorf Tear Strength (MD)	ASTM D1922	40 g
Elemdorf Tear Strength (TD)	ASTM D1922	380 g
Puncture, lbs	Internal	9
Dart Impact F50, g	ASTM D1709A	70



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## **TUFflex Premium Plus Handwrap** 11.9 Micron / 47 Gauge / 0.47 Mil

Not intended as limiting specifications.

CHARACTERISTICS

### VALUES

Manufacturing Process	Blown
Thickness (nominal)	11.9 Micron / 47 Gauge / 0.47 Mil
Film Width (inches)	18
Length (feet)	1476'
Net Weight / Roll (lbs. – nominal)	20.0
Roll Diameter (O.D., inches)	4.4
Core I.D.	3"

TESTS	METHODS	VALUES
Ultimate Tensile MD (psi)	ASTM D 882	6100 psi
Ultimate Tensile TD (psi)	ASTM D 882	4600 psi
Elongation MD (%)	ASTM D 882	310%
Elongation TD (%)	ASTM D 882	540%
Tear Resistance MD (grams)	ASTM D 1922	230 g/mil
Tear Resistance TD (grams)	ASTM D 1922	650 g/mil
Puncture Resistance (in-lbs.)	ASTM D 4649	25.5 in-lbs
Ultimate Prestretch (%)	Mfg./Highlight	N/A
Cling (in to out, grams)	Mfg. method	130 g/in



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