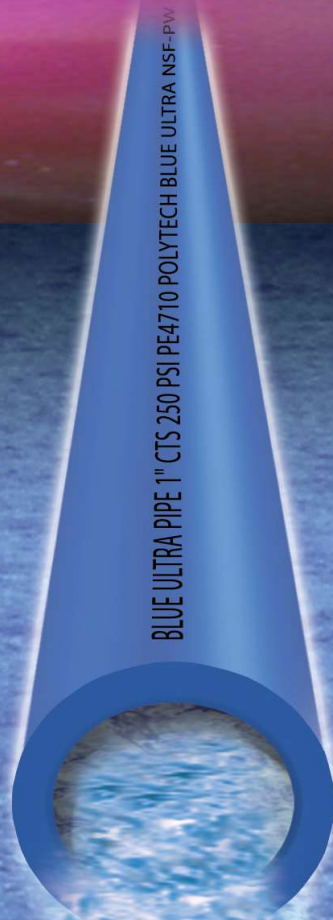


BLUE ULTRA PIPE
THE NEWEST STANDARD
IN ULTRA VIOLET RAY
PROTECTION



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BLUE ULTRA PIPE

- BLUE ULTRA is extruded using current state of the art 100% pure PE4710 virgin resin with decades of successful history - no extra wall thickness is required to retain its extreme level of UV protection & safety
- BLUE ULTRA Pipe & Tubing contains no regrind resin in its' manufacture
- BLUE ULTRA is produced to all applicable standards, using a Dark Blue, Unique, Custom UV Stabilized Color Package that is far superior to piping products using lighter color pigments that are co-extruded
- BLUE ULTRA'S pipe wall is colored Dark Blue throughout the entire wall – further enhancing its Dark Blue color and superior UV protection – contrary to co-extruded products that only color the outer wall to twenty-thousandths, roughly the thickness of six or seven sheets of standard copy paper
- BLUE ULTRA provides two-years of UV protection in outside storage as compared to approximately six months for lighter colored co-extruded natural color pipe cores
- BLUE ULTRA'S name was chosen because of its Ultra-Safe UV protection, plus the resin used to manufacture it is 100% ULTRA pure, virgin resin
- BLUE ULTRA'S - ULTRA pure 100% virgin resin used in its manufacture coupled with its FDA approved Dark Blue UV stabilized color pigment, is - as a pipe, probably more pure than the water that will transverse through it
- BLUE ULTRA'S pipe wall is 100% Dark Blue colored. Therefore, its UV protection is less susceptible to negatively affect long-term performance because of surface abrasions, scuffs or gouges – within limits of course
- BLUE ULTRA is permanently indented with a color enhanced print statement
- BLUE ULTRA has heat sealed coil ends with internal pressure – for guaranteed clean pipe
- BLUE ULTRA has large, legible, bar coded, color coordinated labels
- BLUE ULTRA is bundled and stretch wrapped for handling, shipping, & storage protection

BLUE ULTRA PIPE

BLUE ULTRA Polyethylene pipe and tubing has been designed specifically for cold water pressure application, being produced using a custom Dark Blue UV Stabilization Color Package that greatly increases UV protection.

Our Custom UV Stabilization Package is far superior to the lighter blue colors used in the industry because darker colors typically provide better protection. Our superior UV Protection is further enhanced by using the Dark Blue color throughout the entire wall of the pipe. BLUE ULTRA'S Custom Dark Blue UV Stabilization Package meets FDA (Food & Drug Administration) for purity.

BLUE ULTRA Pipe & Tubing uses a state of the art, ULTRA-PURE virgin high density resin that is routinely tested for Certification by the NSF International Standard 14 & NSF/ANSI 61 for health effects requirements and is listed with the Plastic Pipe Institute as having a PE4710 pipe material designation code for pressures 100 PSI and above. BLUE ULTRA meets ASTM D3350, ASTM D2239, ASTM D2737 & AWWA C901.

RESIN PROPERTIES

Density (Natural)	0.949 g/cc	ASTM D4883
Density (Blue)	0.959 g/cc	
Melt Index 190 C/ 21.6 kg	8g/10 min	ASTM D1238
Tensile Strength	3625 psi @ Yield (2 in/min)	ASTM D638
	5500 psi @ Break (2 in/min)	ASTM D638
Elongation @ Break (2 in/min)	>600%	ASTM D638
Flexural Modulus ²	135,000 psi	ASTM D790A
Hardness (Shore D)	64	ASTM D2240
Brittleness Temperature	<-180° F	ASTM D746
Vicat Softening Point	259° F	ASTM D1525
Hydrostatic Design Basis	1600 psi @23° C	ASTM D2837
	1000 psi @60° C	ASTM D2837
Environmental Stress Crack Resistance ³	>5,000 hrs	ASTM D1693
Cell Classification	445576E	ASTM D3350

² 2% Secant-Method 1

³ Condition B

BLUE ULTRA 100 PSI, PE4710 ASTM D-2239 SDR 19, NSF LISTED (USE INSERT FITTINGS)

Size	O.D.	I.D.	Wall	WT/Coil	Coil Lengths	Bundle Qty
3/4"	.944"	.824"	.060"	7.4#	100' & 400'	7 / 5
1"	1.169"	1.049"	.060"	9.5#	100' & 300'	8 / 5
1-1/4"	1.526"	1.380"	.073"	14.8#	100' & 300'	6 / 5
1-1/2"	1.780"	1.610"	.085"	20.2#	100' & 300'	6 / 5
2"	2.285"	2.067"	.109"	32.4#	100' & 200'	6 / 4

BLUE ULTRA 125 PSI, PE4710 ASTM D-2239 SDR 15, NSF LISTED (USE INSERT FITTINGS)

Size	O.D.	I.D.	Wall	WT/Coil	Coil Lengths	Bundle Qty
3/4"	.944"	.824"	.060"	7.4#	100' & 400'	7 / 5
1"	1.189"	1.049"	.070"	10.9#	100' & 300'	8 / 5
1-1/4"	1.564"	1.380"	.092"	18.7#	100' & 300'	6 / 5
1-1/2"	1.824"	1.610"	.107"	25.1#	100' & 300'	6 / 5
2"	2.343"	2.067"	.138"	41.6#	100' & 200'	6 / 4

BLUE ULTRA 160 PSI, PE4710 ASTM D-2239 SDR 11.5, NSF LISTED (USE INSERT FITTINGS)

Size	O.D.	I.D.	Wall	WT/Coil	Coil Lengths	Bundle Qty
1/2"	.742"	.622"	.060"	5.6#	100' & 400'	6 / 5
3/4"	.968"	.824"	.072"	8.8#	100' & 400'	7 / 5
1"	1.231"	1.049"	.091"	14.3#	100' & 300'	8 / 5
1-1/4"	1.620"	1.380"	.120"	24.8#	100' & 300'	6 / 5
1-1/2"	1.890"	1.610"	.140"	33.6#	100' & 300'	6 / 5
2"	2.427"	2.067"	.180"	55.5#	100' & 200'	6 / 4

BLUE ULTRA 200 PSI, PE4710 ASTM D-2239 SDR 9, NSF LISTED (USE INSERT FITTINGS)

Size	O.D.	I.D.	Wall	WT/Coil	Coil Lengths	Bundle Qty
1/2"	.760"	.622"	.069"	6.4#	100' & 400'	6 / 5
3/4"	1.008"	.824"	.092"	11.6#	100' & 400'	7 / 5
1"	1.283"	1.049"	.117"	18.8#	100' & 300'	8 / 5
1-1/4"	1.686"	1.380"	.153"	32.3#	100' & 300'	6 / 5
1-1/2"	1.968"	1.610"	.179"	43#	100' & 300'	6 / 5
2"	2.527"	2.067"	.230"	73.3#	100' & 200'	6 / 4

BLUE ULTRA 250 PSI, PE4710 ASTM D-2239 SDR 7, NSF LISTED (USE INSERT OR COMPRESSION FITTINGS)

Size	O.D.	I.D.	Wall	WT/Coil	Coil Lengths	Bundle Qty
3/4"	1.060"	.824"	.118"	15.2#	100' & 400'	7 / 5
1"	1.349"	1.049"	.150"	24.3#	100' & 300'	8 / 5
1-1/4"	1.774"	1.380"	.197"	42.4#	100' & 300'	6 / 5
1-1/2"	2.070"	1.610"	.230"	57.8#	100' & 300'	6 / 5
2"	2.657"	2.067"	.295"	95.2#	100' & 200'	6 / 4

BLUE ULTRA 250 PSI, PE4710 CTS, ASTM D-2737 SDR 9, NSF LISTED (USE COMPRESSION FITTINGS)

Size	O.D.	I.D.	Wall	WT/Coil	Coil Lengths	Bundle Qty
3/4"	.875"	.681"	.097"	10.3#	100' & 500'	7 / 5
1"	1.125"	.875"	.125"	16.9#	100' & 300'	8 / 5
1-1/4"	1.375	1.069"	.153"	25.4#	100' & 300'	6 / 5
1-1/2"	1.625"	1.263"	.181"	35.3#	100' & 300'	6 / 5
2"	2.125"	1.653"	.236"	60.2#	100' & 200'	6 / 4

MODEL SPECIFICATION FOR POLYETHYLENE PIPE and TUBING

FOR WATER MAINS and WATER SERVICE LINES

I. General

All polyethylene pipe, and tubing furnished under this specification and as manufactured by Polyethylene Technology, Inc., a Minnesota Corporation, shall conform to all applicable provisions and requirements of the latest revision of AWWA C901, CSA B137.1 and, by inclusion, all appropriate standards referenced therein.

II. Materials

Polyethylene compounds utilized in the manufacture of products as furnished by Polyethylene Technology, Inc, under this specification shall be listed in PPI TR-4, have a grade of PE4710 with a minimum cell classification of PE 445576E, as defined in ASTM D3350. In conformance with AWWA C901, or CSA B137.1, they shall have a PPI recommended Hydrostatic Design Basis (HDB) of 1600 psi (PE4710) at a temperature of 73.4°F.

III. Pipe and Tubing

BLUE ULTRA Pipe and tubing as manufactured by Polyethylene Technology, Inc. or its equal as defined under this specification, shall be manufactured using 100% virgin compounds complying with the requirements of Section II above and shall be Blue in color with the wall of the pipe or tubing being 100% solid Blue. There shall be no re-worked resin of any type or kind.

Dimensional and performance characteristics shall conform to the requirements of AWWA C901, or CSA B137.1. The pipe's SDR (Size Dimension Ratio) and Working Pressure Rating (WPR) shall be 250 PSI rated, SODR 9 Copper Tube Size (C.T.S.) or SIDR 7 Iron Pipe Size (I.P.S.) & Solid wall colored Blue for identification purposes.

IV. Marking

Polyethylene Technology, Inc. pipe and tubing shall have a permanently indented marking into the outside wall at a minimum of every two feet along the barrel of the pipe or tubing identifying the product. The permanently indented marking will include the Manufacturers name, product trade name, pressure rating, SODR 9 (for CTS), ASTM D-2737, NSF & a quality control code. For Iron Pipe Size – the marking is SIDR 7 (for I.P.S.) ASTM D-2239, NSF & a quality control code.

V. Workmanship

Pipe and tubing shall be homogeneous throughout, and free of visible cracks, holes, foreign inclusions, blisters, dents, or other injurious defects. The pipe and tubing shall be as uniform as commercially practicable in color, opacity, density, and other physical properties.

VIII. Quality Control

Pipe, tubing and fittings furnished under this specification shall comply with AWWA C901, or CSA B137.1 which ever applies.