TPI Partners, Inc. dba Thermoplastic Processes
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Lab Tubing

Property	Method	Value / Rating Required	Excelon's Test Method	Excelon's Value / Rating
Durometer Hardness (Shore A), 15s	ASTM-D2240	56	ASTM-D2240/Stand	57
Tensile Strength, psi (Mpa)	ASTM-D412	1,750 (12.1)	ASTM-D638*	2000
Ulitimate Elongation, %	ASTM-D412	425	ASTM-D638*	460
Tear Resistance, lb-f/inch (kN/m)	ASTM-D1004	173 (31)	ASTM-D1004	250
Specific Gravity	ASTM-D792	1.21	ASTM-D792	1.18
Water Absorption, % 24hrs at 73F (23C)	ASTM-D570	0.21	ASTM-D570	0.04
Compression Set - Constant Deflection, % at 158F (70C) for 22 hours	ASTM-D395 Method B	64	ASTM-D395 Method B	72
Brittle Temperature, F (C)	ASTM-D746	-32 (-36)	ASTM-D746	(-48C)
Maximum Recommended Operating Temperature, F (C)	-	165 (74)		165
Tensile Stress @ 100% Elongation, psi (MPa)	-	582 (4.0)	ASTM-D638*	695
Tensile Set, %	ASTM-D412	95	Not Applicable for PVC**	NA
Color	-	CLEAR		CLEAR

*Tensile Property Testing for PVC based materials is performed using ASTM D638, while ASTM D412 is used for Vulcanized Rubber and Thermoplastic Elastomers. However, for the large majority of our Flexible PVC products, including the one listed above, the test specimen dimensions (Type IV in D638 and Die C in D412) and the test pull speed (20"/min) are equivalent between ASTM D638 and ASTM D412. In other words, the test values do not get affected due to the method number difference.

**Tensile Set testing is performed on Vulcanized Rubber and Thermoplastic Elastomers per ASTM D412. Tensile Property Testing for other Plastics (such as PVC) is performed using ASTM D638, in which Tensile Set is not a test.