

PRODUCT COMPARISON DATA

	Product Description	Units	Test Method ASTM	PVC	Corzan® CPVC	Proteus® Natural Homopolymer Polypropylene	Proteus® Natural Co-Polymer Polypropylene	Proteus® White Homopolymer Polypropylene	Proteus® Natural O & P Homopolymer Polypropylene
				Extruded & Compression Molded	Extruded & Compression Molded	Extruded & Compression Molded	Extruded & Compression Molded	Extruded & Compression Molded	Extruded & Compression Molded
MECHANICAL	1 Specific Gravity, 73°F	-	ASTM D792	1.4	1.56	0.91	0.9	0.91	0.91
	2 Yield Point, 73°F	psi	ASTM D638	8,350	6,150	4,800	3,400	4,000	4,800
	3 Tensile Elongation (at yield), 73°F	%	ASTM D638	5	3	14	11	12	14
	4 Tensile Break, 73°F	psi	ASTM D638	8,350	6,700	4,800	4,800	4,800	4,800
	5 Tensile Elongation (at break), 73°F	%	ASTM D638	20	12	400	300	300	400
	6 Tensile Modulus of Elasticity, 73°F	psi	ASTM D638	465,000	260,000	190,000	152,000	173,000	190,000
	7 Flexural Modulus of Elasticity, 73°F	psi	ASTM D790	398,000	388,000	195,000	180,000	180,000	195,000
	8 Hardness, Durometer D	-	ASTM D2240	89	84	78	72	78	78
	9 Izod Impact (notched) 73°F	ft. lb./in.	ASTM D256 Type "A"	0.4	3.2	1.2	8	1.9	1.2
THERMAL	10 Heat Deflection Temperature (HDT)	°F	ASTM D648	-	-	205	212	210	210
	11 Melt Point	°F	ASTM D3418	-	-	324	305	327	327
	12 Continuous Service Temp in Air (max) (1)	°F	-	140	200	180	180	180	180
	13 Surface Resistivity	Ohm-cm	ASTM D257	> 10 ¹²	> 10 ¹²	> 10 ¹⁵	> 10 ¹⁵	> 10 ¹⁵	> 10 ¹⁵
	14 Volume Resistivity	Ohm	ASTM D257	> 10 ¹²	> 10 ¹²	> 10 ¹⁵	> 10 ¹⁵	> 10 ¹⁵	> 10 ¹⁵
	15 Flammability (5)	-	UL94	V0	V0	HB	HB	HB	HB
CHEMICAL (3)	16 Water Absorption	% by wt.	ASTM D570 (2)	-	-	-	-	-	-
	17 Acid, Weak	@73°F	-	A	A	A	A	A	A
	18 Acid, Strong	@73°F	-	L	L	A	A	A	A
	19 Alkalies, Weak	@73°F	-	A	A	A	A	A	A
	20 Alkalies, Strong	@73°F	-	A	A	A	A	A	A
	21 Hydrocarbons, Aromatic	@73°F	-	U	U	U	U	U	U
	22 Hydrocarbons, Aliphatic	@73°F	-	L	L	U	U	U	U
	23 Ketones, Esters	@73°F	-	U	U	U	U	U	U
	24 Ethers	@73°F	-	U	U	U	U	U	U
	25 Chlorinated Solvents	@73°F	-	U	U	U	U	U	U
	26 Alcohols	@73°F	-	A	A	A	A	A	A
	27 Inorganic Salt Solutions	@73°F	-	A	A	A	A	A	A
	28 Sunlight	@73°F	-	U	U	U	U	U	U