

Technical Data Sheet

DURALON J, JE, JM, JEM

Type 11 Nylon

Color Range	Unlimited
Specific Gravity	1.04 (Approx.)
Hardness, Shore D	70 - 75
Tensile Strength, psi (ASTM D-638)	6000 - 9000
Elongation (ASTM D-638)	20% Minimum
Modulus Of Elasticity, psi	2.1 x 10 ⁵
Dielectric Strength, v/mil	1400 @ 15 mils
Abrasion Resistance C/S 10 wheel 1000 gm load	20 MG/5000 Cycles
Average Particle Size Duralon J (Fluid-bed Grade)	140 Mesh ±10 105 Micron ± 10
Average Particle Size Duralon JE (Electrostatic Grade)	230 Mesh ± 10 63 Micron ± 10
Melting Point	376° F
Water Absorption at 68°F (65% RH to equilibrium)	1.05%
Water Absorption at 68°F (in water to equilibrium)	1.85%
Weathering	Very good in white, black, and pastel colors
Salt Spray	No corrosion after 2000 hours.
Autoclave	Good

CHEMICAL RESISTANCE:

In general, good resistance to mineral salts, alkalies, most solvents and organic acids. Caution must be observed in uses involving mineral acids, phenols and certain chlorinated solvents. In such cases, it is advisable to carry out a testing program to determine the suitability of the application.



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DURALON 12 Type 12 Nylon

Property	Test Method DIN/ISO	Value
Color Range		Unlimited
Density	DIN 53 479 Method B ISO 1183-3	1.12 g/cm ³
Hardness, Shore D	DIN 53 505/ISO868	75 ± 5
Tensile Strength	DIN EN/ISO 527	42 N/mm ²
Tensile Stress at break		36 N/mm ²
Tensile Strain at break		135 %
Ball Indentation Hardness	DIN EN/ISO2039	101 N/mm ²
Melting Point	DIN EN/ISO 3146	349° F 176° C
Water Absorption	DIN 53 495/ISO 62	
212° F , water immersion		1.65 %
73° F, 96% +relative		1.21 %
73° F, 50% +humidity		0.48 %
Taber Abraser	DIN 53 754/ASTM D1242	11mg/100 turns
Dielectric Breakdown Voltage	DIN IEC 60 243-2	89 kV/mm
Salt Spray		No corrosion after 2000 hours.
Autoclave		Coating should be tested.

CHEMICAL RESISTANCE:

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The above properties of DURAVIN, DURALON or DURATOP products are based upon tests and data believed to be reliable, since actual use by others is beyond our control, no guarantee, expressed or implied, is made by Protech Chemicals as to the effects of such use or results to be obtained.