DURALON™

The Protech Group offers high-performance Nylon (Polyamide) thermoplastic powder coatings engineered for superior abrasion resistance, chemical durability, and thermal stability. Designed for demanding industrial, automotive, and consumer applications, our coatings offer a tough, flexible finish that withstands wear, impact, and harsh environments. With excellent adhesion and a wide range of colors and finishes, they provide both protection and aesthetic value across various substrates.

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OVERVIEW

Nylon Thermoplastic Powder Coatings.

DURALON™ is a nylon-11 based thermoplastic powder coating, produced from a renewable source. DURALON is utilized in numerous applications due to its exceptional properties, which include excellent chemical and thermal resistance, as well as outstanding outdoor durability.

DURALON is easy to apply in either electrostatic spray, fluidized bed, or mini-coat applications, and can be applied as a one-step process or, for added adhesion, a two-step process. It is available in a wide range of custom colors and metallic finishes.

MAIN FEATURES

- **Excellent Corrosion and Chemical Resistance –** Protects against rust and harsh chemicals
- **Excellent Heat and Autoclaving Resistance –** Performs under high temperatures
- **High Durometer –** Hard, stable, and impact-resistant
- **Many Colors and Metallics Available –** Wide range of colors and finishes

TYPICAL APPLICATIONS

- **Wire Goods and Racks -** Dishwasher racks, freezer baskets, and storage grids
- **Food Processing Equipment -** Trays, hoppers, and conveyors; food-safe wire shelves, cooling racks; drying grids
- **Medical and Laboratory Devices -** Trays, instrument holders, equipment brackets
- **Automotive Components -** Under-hood parts
- **Tools and Hardware -** Hand tools, fasteners, clamps, and handles for abrasion resistance
- **Industrial Machinery -** Gears, rollers, and parts exposed to friction and wear

TECHNICAL PROPERTIES

Essential technical details are outlined below. Full Technical Data Sheet (TDS) available upon request.

GRADE		Fluidized bed, spray, mini-coat
MELTING POINT	ISO 3146	379°F
DENSITY @ 23 °C	ISO 1183	1.06 g/cm^3
SHORE HARDNESS D	ISO 868	70-75
BALL INDENTATION HARDNESS	ISO 2039-1	101 N/mm^2
TENSILE TEST STRESS AT YIELD STRAIN AT YIELD STRAIN AT BREAK	 ISO 527-1 ISO 527-2	 42 Mpa 6%> 100%
VOLUME RESISTIVITY	IEC 60093	10^{12} Ω · m
DIELECTRIC BREAKDOWN VOLTAGE	IEC 60243-1	85 kV/mm
WATER ABSORPTION - 100 °C, IMMERSION	ISO 62	
MOISTURE ABSORPTION 23 °C, 96 % R. H. 23 °C, 50 % R. H	ISO 62	1.65% 1.2% 0.5%
COEFFICIENT OF LINEAR EXPANSION 23 – 55 °C	ISO 11359	1.04 10-4 ·K-1
THERMAL CONDUCTIVITY	DIN 52612	0.22 – 0.27 W/mK
SPECIFIC HEAT	DIN 53765	2.35 J/g · K
TABER ABRASION - CS17, 500G	ASTM D2247	< 1 mg @ 100
SPECIFIC GRAVITY		1.11 (approx.)

FORMULATING THE RIGHT MIX.

Since 1976, the Protech Group has been developing and manufacturing coatings, paints, and specialty materials. Through quality and innovation, we formulate the right mix to protect and enhance what matters most to our customers. Protech Group products are manufactured in more than 20 sites worldwide. We serve our customers in countless markets and industries, including construction, infrastructure, transportation, consumer goods, and healthcare.

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