

DURALON™

THERMOPLASTIC COATINGS



DURALON™ is a nylon-based, two-coat thermoplastic powder coating derived from renewable sources. Known for its exceptional chemical resistance, heat tolerance, and outdoor durability, DURALON™ is suitable for a wide range of demanding applications. It can be applied using electrostatic spray, fluidized bed, or mini-coat techniques, offering versatility in processing. Available in custom colors and metallic finishes, DURALON™ combines performance, sustainability, and aesthetic flexibility.



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 is available in a range of custom colors and metallic finishes.

MAIN FEATURES

- **Excellent Corrosion and Chemical Resistance** – Protects against rust and harsh chemicals
- **Excellent Heat Resistance** – Performs under high temperatures
- **High Durometer** – Hard, stable, and impact-resistant
- **Withstands Autoclaving** – Handles high-pressure steam sterilization
- **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



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TECHNICAL PROPERTIES

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

TYPE	METHOD	RESULT
GRADE		Fluidize 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	ISO 527-1	42 Mpa
STRAIN AT YIELD	ISO 527-2	6% > 100%
STRAIN AT BREAK		
VOLUME RESISTIVITY	IEC 60093	10 ¹² Ω · m
DIELECTRIC BREAKDOWN VOLTAGE	IEC 60243-1	85 kV/mm
WATER ABSORPTION - 100 °C, IMMERSION	ISO 62	1.65%
MOISTURE ABSORPTION		
23 °C, 96 % R. H.	ISO 62	1.2%
23 °C, 50 % R. H.		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.)

SOLUTIONS

We provide tailored nylon thermoplastic powder coating solutions for a wide range of industries, delivering reliable protection, durability, and performance. Whether for automotive, industrial, food processing, or consumer goods, our coatings meet the specific demands of each application with high-quality finishes and lasting results.

SUPPORT

To ensure the life of your asset is maximized, a simple and regular maintenance program should be implemented.

At The Protech Group, we prioritize your satisfaction and success. That's why we offer free support, even when challenges arise. From cleaning and phosphating all the way to the final cured film appearance, our experts are dedicated to assisting you every step of the way with proven solutions you can trust.

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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