

LB-SERIES™

THERMOSET POWDER COATINGS

LB-SERIES™ is a specially formulated thermoset powder coating solution designed to lower baking temperatures and reduce curing times, resulting in less energy usage and faster production, without sacrificing performance. This unique system allows curing temperatures to be approximately 30 to 60°C lower (ranging from 140°C to 170°C), leading to energy savings and cost reductions of up to 25%. Furthermore, adopting LB-SERIES™ enhances productivity with an average 20% quicker cure time.



OVERVIEW

High Performance. Low Bake.

The Protech Group's low-bake thermoset powder coatings deliver high performance while curing at lower temperatures, making them ideal for MDF, plastics, thin metals, and other temperature-sensitive substrates. From furniture and

appliances to automotive, construction, and industrial goods, they provide durability, energy savings, and sustainability—all with the same finish quality expected from Protech coatings.

MAIN FEATURES

- **Energy Savings** – Lower baking temperatures result in reduced energy consumption and decreased costs.
- **Environmental Friendliness** – Decreased energy usage contributes to lower CO2 emissions, thereby supporting corporate sustainability goals.
- **Productivity & Efficiency** – Quicker curing times and lower temperatures enhance production line efficiency, yielding greater productivity.
- **Heat-Sensitive Substrates** – Ideal for coating materials that cannot endure high baking temperatures, including wood, plastic, and certain metals.
- **No Compromise on Performance** – Formulations are crafted to uphold the durability, corrosion resistance, and visual appeal of the coating.

TYPICAL APPLICATIONS

LB-SERIES™ powders are perfect for specialty applications that involve temperature-sensitive substrates, including engineered temperature-resistant plastics, composites, and MDF wood, which may warp under elevated temperatures. Additionally, they work well with porous materials that tend to outgas, such as iron castings and galvanized steel.

- **Furniture & Wood Products:** MDF furniture, office furniture, architectural millwork
- **Electronics & Appliances:** Computer housings, small appliances, lighting fixtures
- **Automotive & Transportation:** Interior trims, aluminum wheels, lightweight components
- **Building & Construction:** Decorative panels, architectural elements, doors & windows
- **Industrial & General Goods:** Fixtures & displays, metal furniture, garden equipment

LB-SERIES™ can be formulated to be compliant with certain guidelines, including QUALICOAT standards. LB-SERIES™ formulations can also contribute to sustainable building certifications and credits including LEED, BREEAM, and more. Ask our experts which certification or accreditation is available in your area.



TECHNICAL PROPERTIES

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

PRE-TREATMENT	For steel and Aluminum–Phosphating or Zirconium, media blast or other suitable surface treatment
APPLICATION CONDITIONS	Electrostatic powder spray 40 to 100 kv
FILM THICKNESS	For normal usage 2.5 to 5.0 mils (color and finish type related)
HARDNESS	HB to 4H (formulation related)
SPECIFIC GRAVITY	1.2 to 1.75 (color related)
COVERAGE	160 to 110 ft ² / lbs / mil at 100% efficiency (Color related)
BAKING SCHEDULE	• Super low-temperature cure: 10-30 minutes at 280°F (138°C); epoxy can cure at 250°F. • Low-temperature cure: 8-20 minutes at 320°F (160°C). • Fast cure: 2-5 minutes at 400°F (205°C).



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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