



CHEM PROCESSING, INC.

Platings & Coatings for Industry

Organic Finishing

Organic finishing is defined as the application of an organic film or coating to a surface to alter its inherent characteristics. More common designations for organic finishing are “painting” or “powder coating.” Chem Processing, Inc. offers a variety of organic finishes, including both thermoplastic and thermosetting powder. Thermoplastic powders are applied as dry particulates that form a smooth coating when exposed to heat and soften upon subsequent reheating. Examples of thermoplastic powders include nylon, PTFE (Teflon™), polyethylene and vinyl. Thermosetting powders, which do not soften upon reheating, include epoxies, epoxy/polyester hybrids and acrylics. Advantages of such coatings include corrosion resistance, abrasion resistance, aging characteristics, appearance and cost.

Organic Finishes by Trade Name:

- **Delta-Seal™**: suitable over many metallic substrates; acid/alkali/petroleum resistant
- **Dry Film Lubricant**: wear and corrosion resistant; allows for repeated disassembly
- **Emralon®**: low friction coating; high-gloss finish
- **Kynar® PVDF**: chemical and abrasion resistant; flame retardant; thermally stable; flexible; UV resistant
- **Nylon**: black; low-friction coating; abrasion, wear and chemical resistant; machinable
- **Teflon®**: non-stick coating suitable for pharmaceutical and biopharma applications
- **Xylan®**: wear-resistant, nonstick coating; available in a variety of colors

Engineering Properties of Thermoplastic Powders:

	Epoxy	Epoxy Hybrids	Urethane Polyester
Primer Required	Yes	Yes	No
Melting Point (°C)	130-150	186	160-170
Adhesion	Excellent	Excellent	Excellent
Hardness (Pencil)	HB-2H	B	B-H
Salt Spray Resistance	Good	Excellent	Good
Acid Resistance	Excellent	Fair	Good
Alkali Resistance	Excellent	Excellent	Good
Solvent Resistance	Fair	Excellent	Fair

Chem Processing Inc. is committed to excellence in metal finishing. Chem Processing Inc. uses their engineering expertise and computerized process controls to **exceed their customer's expectations** when adherence to strict thickness specifications is essential.