Resodyn ENGINEERED POLYMERIC SYSTEMS

Innovative Coating Technologies™

Product Data Sheet

ResoCoat™ TS-962

Polyester Thermoset Powder Coating

PHYSICAL PROPERTIES

Bond strength of ResoCoat™ TS-962 Coating on Steel (ASTM D-4541)	>800 psi
Bond strength of ResoCoat™ TS-962 Coating on Aluminum (ASTM D-4541)	>800 psi
Flexibility (Mandrel Bend ASTM D-522-93)	No Failure by visual inspection
Direct Impact (ASTM D-5420, 160 in-lbs)	No Failure by visual inspection
Reverse Impact (ASTM D-5420, 160 in-lbs)	Minor cracks with no visual flakes or debonding
Finish appearance	Smooth surface with gloss finish
Gloss (20°, 60°, 85° Gloss, ASTM D-523)	42,82,100 gloss units
Hardness (Pencil Hardness ASTM d-3363)	2H - Pencil Hardness
MEK/Mineral Spirits Cure Evaluation (MIL-PRF-24712A)	100% coating retention after 100 double rubs
Glass Transition Temperature (T_G) (DSC, 10° F/min ramp)	150° F
Abrasion, Taber (ASTM 4060)	91 mg
Corrosion Resistance, Salt Fog (ASTM D-1654)	<0.078 inches (2 mm) at 2000h
Thermal Shock (MIL-PRF-24712A)	No visual defects after 10 cycles of -76° F to +165° F
Type	Ready to use Polymer Thermal Spray dry powder, 100% <100 micron (140 mesh)
Coatings VOC (g/L)	None
Shelf life	One year when stored at 70° F in unopened original sealed container
Application Rate	70 to 200 square feet per hour
PTS Application Process Temperatures	Preheat 230-266° F - Application 340-365° F
Thickness (suggested range)	3-6 mils
Coverage (per pound)	27 ft^2 at 5 mils thickness

Physical properties were determined on specimens prepared under laboratory conditions using applicable ASTM procedures. Actual field conditions may vary and yield different results; therefore, data are subject to reasonable deviation.

ResoCoat™ TS-962 is Polyester Thermal Spray applied Powder Coating Finish that achieves full cure as applied without the need for any post-coating oven cure cycle. This powder coating material is specially formulated for use with the Resodyn family of Polymer Thermal Spray (PTS) systems to allow for portable powder coating of substrate surfaces in-place and virtually anywhere.

ResoCoat™ TS-962 Polyester is a highly flexible coating formulated for superior adhesion to the substrate. It provides outstanding resistance to ultra-violet light, gloss/color fade, harsh chemicals, and corrosion, impact and other physical damage. The coating is ready for immediate use following application.

ResoCoat™ TS-962 coating material may be applied directly to properly prepared steel and aluminum surfaces. Damaged coating may be repaired with the same material and PTS application process in-place without the need to remove the coated object from service.

COATING CHARACTERISTICS

- Flows out and achieves full cure during application without oven bake cycle.
- Excellent corrosion and impact resistance
- Flexible while retaining adhesion
- Zero VOCs
- Excellent adhesion
- Easy repair and touch-up, in-place with same powder and PTS process
- Repair other traditional powder coatings

The Resodyn family of Polymer Thermal Spray (PTS) coating systems is a powder coating technology exclusively designed and developed for the deposition of polymeric coatings directly from dry powder without the need for oven baking, or post curing. The patented and patents pending PTS coating technology can be used to thermally spray thin (< 200 µm) and robust coatings of unlimited thickness. The PTS system can deposit thermoplastic and specially formulated thermosetting polymers, as well as UV curable polymers and syntactic foams on metal, polymer and ceramic based substrates and even heat sensitive substrates such as cardboard, paper, and electronic circuits.