Resodyn ENGINEERED POLYMERIC SYSTEMS

Innovative Coating Technologies™

Product Data Sheet

ResoCoat™ F-010

Flame Resistant Thermal-Insulation Powder Coating

(Meets or exceeds all requirements of MIL-PRF-81904C)

PHYSICAL PROPERTIES

Bond strength of ResoCoat™ F-010 Coating on Steel/Aluminum (ASTM D-4541)	up to 1500 psi
Direct Impact (ASTM D-5420 / MIL_PRF_81904C, 120 in-lbs)	Pass
Reverse Impact (ASTM D-5420 / MIL_PRF_81904C, 40 in-lbs)	Pass
Finish appearance	rough surface with low gloss finish
Hardness (Shore D ASTM D-2240)	65 shore D
Resistance to Lubricating oil, Ethanol, Kerosene (MIL-PRF-81904C)	Pass
Weathering resistance (ASTM G-155)	Pass
Humidity resistance (ASTM 2247)	Pass
Thermal Shock (MIL-PRF-81904C, -40° F to +140° F, 24 hour cycles for 28 days)	Pass
Type	Ready to use Polymer Thermal Spray dry powder, 100% <250 micron (60 mesh)
Coatings VOC	Very Low
Shelf life	One year when stored at 70° F in unopened original sealed container
Application Rate	40 to 100 square feet per hour
PTS Application Process Temperatures	Preheat 250-270° F - Application 360-430° F
Thickness	120-200 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™ F010 Thermal-insulation compound is Thermal Spray applied Powder Coating 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™ F-010 is a highly effective flame resistant (intumescent) thermal-insulation coating that meets or exceeds all of the requirements of MIL-PRF-81904C specification. The coating compound is asbestos and solvent free and is ready for immediate use following application.

ResoCoat™ F-010 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

- Excellent Flame/Thermal-insulation protection for substrate
- Flows out and achieves full cure during application without oven bake cycle
- Corrosion and impact resistant
- Outstanding adhesion
- Easy repair and touch-up, in-place with same powder and PTS process
- Very low VOCs

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.