



Low Temperature Thermoplastic  
Polymer Powder Made for the  
TeroDyn®2000 and 3000 Thermal Spray Systems

# **ThermoTec**

## **18934**



- Excellent chemical resistance
- Excellent frictional characteristics
- Good impact resistance
- Good machinability (turning)
- Good thermal properties

# ThermoTec 18934

## TECHNICAL DATA

ThermoTec 18934 is a thermoplastic polymer powder suitable for use with the TeroDyn 2000 system or the TeroDyn 3000 system.

For either delivery system, the low temperature air shroud should be used. ThermoTec 18934 can be applied with the TeroDyn 2000 using acetylene as the fuel gas. The TecFlo 2000 Hopper is also required. ThermoTec 18934 can be applied with the TeroDyn 3000 using acetylene, propane or propylene as the fuel gas and argon, nitrogen or air as the powder carrier gas.

Typical Values*	
Melting Range:	367°F (186°C)
Coating Density:	1.1 g/cc
Shear Strength (ASTM D732):	5500 psi
Coefficient of Friction:	0.2 (against steel)
Yield Strength:	4500 psi
Elongation:	18%
Specific Heat:	2.1 kJ/kg°k
Thermal Conductivity:	0.3 W/m°k
Coefficient of Linear Expansion:	1.5x10 <sup>-4</sup>
Volume Resistivity:	3.5x10 <sup>17</sup> M/m
Surface Resistivity at 500V:	2.4x10 <sup>-4</sup>
Dielectric Strength:	1000 V/mil
Hardness:	Durometer 75D
Coverage:	0.0072 lb/ft <sup>2</sup> @0.001" thick

Polymer type: Thermoplastic  
Melting point: 367°F (186°C)  
Color: White or Gray (other colors available on demand - minimum quantities may apply)

## PROCEDURE FOR USE:

ThermoTec 18934 can be applied with the TeroDyn 2000 using acetylene as the fuel gas. The TecFlo 2000 Hopper is also required. ThermoTec 18934 can be applied with the TeroDyn 3000 using acetylene, propane or propylene as the fuel gas and argon, nitrogen or air as the powder carrier gas.

## TYPICAL APPLICATIONS

- As a protective coating on chemical mixer blades
- As a sealer for cold process coatings
- For relining copy machines and other roll applications
- As a top coat/sealer for corrosion control coatings
- For surfacing printing rolls
- For relining impellers and pumps used in sewage treatments

### Chemical Resistance:

- Boiling Water: Excellent adhesion after 2000 hours
- Salt Spray: No corrosion resistance after 2000 hours
- SeaWater: No corrosion resistance after 6 years

Observe normal spraying practices, respiratory protection and proper air flow pattern advised. For general spray practices, see AWS Publications AWS C2. 1-73, "Recommended Safe Practices for Thermal Spraying and AWS T55-85, "Thermal Spraying, Practice, Theory and Application." Thermal spraying is a completely safe process when performed in accordance with proper safety measures. Become familiar with local safety regulations before starting spray operations. DO NOT operate your spraying equipment or use the spray material supplied, before you have thoroughly read the equipment instruction manual. Refer to the Eutectic website for Material Safety Data Sheet (MSDS) information. DISREGARDING THESE INSTRUCTIONS MAY BE HAZARDOUS TO YOUR HEALTH.



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