

# XIOM 525

**Description:** Multiplex powder comprising acrylic copolymer, polyethylene resins and PTFE. The coatings are multiphase, bond easily, flow and wet to form smooth and continuous films. With a post spray treatment and cure with siloxane the coating is ideal for anti graffiti applications and release coatings. Specially designed for thermal spraying. This hybrid powder overcomes many of the problems normally encountered when thermal spraying generic plastic powders.

**Application Data:** Surface preparation  
Refer to the Coatings Manual for proper substrate preparation. Each substrate material, i.e. steel, aluminum, masonry, fiberglass, wood, tile, plastics etc. requires special considerations before spraying. Typically, prior to spraying all substrates should be cleaned and degreased. Some roughening is advisable for thick coatings. Liquid primers are not required.

Thermal spraying  
Refer to XIOM's Thermal Spray Manual for detailed processing guidelines. Before spraying, the surface to be coated should be heated to approximately 180°F. The spray torch or other heating device can be used. Begin spray immediately; the surface temperature will rise to 200°F plus during spray as the plastic stream melts (wets) on impact forming a continuous cured film. No bond coating is needed when this procedure is followed.

Spraying may be done at the shop or on-site.

<b>Technical Specifications:</b>	Typical powder information	Powder specially sized for thermal spray
	Coverage (100% efficiency)	180 to 205 sq-ft/ lb. / mil
	Particle size	90% less than 53 um
	VOC content	None
	Thickness (recommended minimum)	5-30 mils
	Storage stability	Unlimited shelf life if stored < 90° F

Coating Performance Properties:	Performance Properties	Testing Method	Results
	Specific gravity	Calculated	0.95 - 0.975 g/cc
	Adhesion		Outstanding
	Hardness (Shore D)	ASTM D 2240	50
	Impact resistance (direct)	-	Very good
	Flexibility	-	Outstanding
	UV resistance	-	Excellent
	Tensile, PSI (Instron) yield	ASTM D 638	> 3000 PSI
	Salt spray resistance		Excellent
	Humidity resistance		Excellent
	Melt point		220 F ( 104.5 °C )
	Flammability	FMVSS 302 09-98	DNI. Does not support combustion during or after ignition.

**Material Spray Parameters:** n/a

**Comments:** The multiplex technology in Xiom 525 is unique to the powder coating industry. Specially formulated for Thermal Spraying, this hybrid powder is designed to achieve high deposit efficiency, very strong substrate adhesion and synergistic interparticle cohesion, providing covalent bonding, easy wetting and flow, thus forming continuous impermeable coatings. The FEP additive contributes non-stick properties and the secondary siloxane treatment makes the surface resistant to graffiti.

A range of colors is available. Refer to the post coating number sequence. The first two digits define the base color and the last two digits identify the shade available for that color. Refer to the color charts for desired color and shade desired. For CLEAR, the number sequence is XT 525-00-00

**Coating  
Characteristics:**

- Good cavitation erosion resistance.
- Outstanding flexibility between freezing and 175F (80C).
- Very high elastic memory.
- Excellent mechanical properties with sound chemical resistance.
- Low moisture absorption.
- Tough and adherent coatings.
- High UV stability promotes better outdoor weathering properties.
- High impact, wear and abrasion resistance.
- Excellent release properties.

XIOM 525 powders are designed for anti-graffiti resistance and release applications. A bond coat of Xiomtek 765 should be used if steel corrosion is a problem or use XT750 if bonding is a problem. Spraying onto the bond coat insures excellent bonding with no thickness limitation and no edge pull back.

Some recommended anti graffiti applications for on-site use include:

- Masonry walls
- Steel structures

**Health and  
Safety:**

Xiom 525 powders are supplied as a finely divided powder. While there are no known health hazards associated with this powder normal handling precautions for dealing with fine organic powders should be taken, i.e., excessive dust generation and inhaling of the powder should be avoided. Always wear a proper dust mask and adjust facilities for removing excess dust from the working area during handling.

Before thermal spraying, refer to the MSDS and Thermal Spray Manual for proper precautions to avoid exposure to combustion products. Xiom 525 contains fluorocarbons which could produce certain hazardous byproducts during spraying. For processing temperatures above 400 C (750 F) if ventilation is inadequate to maintain hydrogen fluoride and carbonyl fluoride concentrations below exposure limits, use a positive pressure air supplied respirator.

It should be appreciated that the information given here is, to the best of our knowledge, true and accurate. However, since conditions under which our materials and equipment may be used are beyond our control, recommendations are made without warranty or guarantee.

Xiom Corp. 78 Lamar Street, West Babylon, New York, 11704 (631) 643-4400 [www.xiom-corp.com](http://www.xiom-corp.com)  
For ordering information, please contact your regional distributor.