



# XIOMTEK 750

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**Description:**

All purpose bond coat powder for on site thermal spray applications. Comprising a patent pending combination of polyamide co-polymer in an epoxy base, XT 750-03-09 bonds to most surfaces including, steel, aluminum, fiberglass, masonry and wood without liquid primers by gripping deep into surface micro pores as it flows and wets to form an impermeable continuous film. This bond coating has high resistance to moisture and is designed for immersion applications. Its chemistry allows for chemical bonding with thermal sprayed top coatings from all the major thermoplastic and thermo set plastic groups.

XT 750-03-09 replaces fuse bond epoxies, two components liquid epoxies urethanes and other liquid primers currently used to treat surfaces for subsequent application of functional top coatings.

**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.

**Technical Specifications:**

Typical Powder Information	Mint green and black powder
Coverage (100% efficiency)	180 to 205 sq ft/ lb. / mil
Particle size	90% less than 53 um
VOC content	None
Thickness (recommended minimum)	3 to 5 mils as bond coating, up to 10 mils for stand alone application
Storage Stability	Unlimited shelf life if stored < 90° F

**Coating Performance Properties:**

Performance Properties	Testing Method	Results
Specific gravity	Calculated	1.12 – 1.13 g/cc
Adhesion	Bend test	Outstanding. Resists 180 degree bend with little cracking and no chipping.
Hardness (Shore D)	ASTM D 3363	Pencil hardness H-2H
Impact resistance (direct)	--	Very good
Flexibility	--	Outstanding
UV resistance	--	
Tensile strength (PSI) (Instron) yield	ASTM D 638	N/A
Salt spray resistance		Excellent
Humidity resistance		Excellent
Melt point and service temperature		230F (110 C). Continuous service temperature not to exceed 180F (82.2°C).
Flammability	FMVSS 302 09-98	DNI. Does not support combustion during or after ignition.

**Material Spray Parameters:**

n/a

**Comments:**

XT 750-03-09 is patent pending and 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 plus easy wetting and flow, thus forming continuous impermeable coatings on most surfaces. The epoxy constituent in the bond coat makes its surface ideal for bonding to functioning top coats.

Top coatings can be applied immediately after the bond coat is down or may be delayed as long as 48 hours or longer.

**Coating  
Characteristics:**

- Outstanding flexibility between freezing and 175F (80C).
- Low moisture absorption therefore it is recommended for immersion applications.
- Tough and adherent coatings.
- High impact, wear resistance.

Some recommended on-site applications include:

- Bond coating for most surfaces especially masonry before applying Xiom 525 anti graffiti coating.
- Bond coating for all surfaces before applying Xiom 520, Xiom 517

**Health and  
Safety:**

XIOMTEK 750-03-09 is 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.

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.

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For ordering information, please contact your regional distributor.