

## RAPID COAT R-10 SERIES POLYURETHANE POWDER COATING

### Polyurethane Semi Glossy

**PRODUCT DESCRIPTION:**

This Polyurethane based powder coating is specifically designed to meet stringent requirements of the construction industry. It provides high levels of gloss retention, colour stability and corrosion protection along with aesthetic looks. This powder provides uniform flow and attractive finish even after recycling.

**APPLICATION:**

These products are highly recommended to meet gloss retention and colour stability requirements. Primary areas of application are architectural aluminium extrusions and claddings.

<b>Powder Properties:</b>	<b>Chemical type</b>	<b>Pure-polyester</b>
	<b>Particle size</b>	Suitable for electrostatic spray
	<b>Gloss</b>	Visually
	<b>Specific gravity</b>	1.2 – 1.9 g/cm <sup>3</sup> depending on colour
	<b>Storage temperature</b>	Dry cool conditions below 30°C peak
	<b>Shelf life</b>	6 months below 30°C peak temperature

**Test Conditions:**

The results shown below are based on mechanical and chemical tests which (unless otherwise indicated) have been carried out under laboratory conditions and are given for guidance only. Actual product performance will depend upon the circumstances under which the product is used.

<b>Substrate</b>	Aluminium
<b>Pre-treatment</b>	Phosphating
<b>Film Thickness</b>	60-80microns
<b>Stoving schedule</b> (Object temperature)	15-18 minutes at 180°C 10-12 minutes at 200°C

<b>Mechanical Tests:</b>	<b>Dry Adhesion</b>	ISO 2409	Pass Gt 0
	<b>Enrichen Cupping</b>	ISO1520 and	Pass
	<b>Dry Film Hardness</b>	ISO2815 (Buchholz)	Pass > 80
	<b>Impact</b>	ASTM D2794	Pass

	<b>Flexibility</b>	ISO1519	Pass
	<b>Gloss</b>	<b>ISO 2813</b>	<b>77±7</b>
<b>Chemical and Durability Tests:</b>	<b>Salt Spray</b>	ISO7253	Pass at 1000 hours - no corrosion more than 1.6mm
<b>Chemical Resistance</b>	<b>Isopropyl Alcohol</b>		15 Cycle pass Generally good resistance to acids, alkalis and oils at Normal temperatures
<b>Colour Stability at Elevated temperatures</b>			Average
<b>Pretreatment:</b> to the	For maximum protection it is essential to pre-treat components prior to the  Application of <b>Powder</b> . Components should receive a full multi- stage pre-treatment to clean and condition the substrate. Detailed advice should be sought from the pre-treatment supplier.		
<b>Application:</b>	<b>Rapid</b> powders can be applied by manual or automatic electrostatic spray equipment. For solid shades, unused powder can be reclaimed using suitable equipment and recycled through the coating system. For mixed colours and certain special effect finishes, advice must be sought from the manufacturer, as to the suitability or otherwise of the product for recycling. Certain special effect finishes may not be suitable for recycling.		
<b>Safety Precautions:</b>	Please consult the Material Safety Datasheet (MSDS)		