



Synthatec Plus Metallic

Chemical type:	Superdurable Polyester
Colour:	Various
Product details:	Meets requirements of BS6496:1984 and BS6497:1984 Approved to Qualicoat (P-0139) and GSB (129c) Superior outdoor durability and colour retention.
Application:	Electrostatic, not suitable for Tribo
Particle size:	3% maximum > 120µm 10% maximum < 10µm 34-42µm average size
Curing:	15 mins @ 190°C (metal temperature) 10 mins @ 200°C (metal temperature) 8 mins @ 210°C (metal temperature)
Gloss level:	matt (visual)
Film thickness:	40-120µm, typically 60µm
Shelf life:	12 months in cool, dry conditions
Health and Safety:	Refer to K1 or K4 Material Safety Data Sheet from Valspar
Product performance:	

This product should be applied according to the guidelines set out in *Application Requirements for Synthatec Plus Metallics* document, which is available from Valspar on request. It is essential to pretreat architectural components prior to application of Synthatec Plus Metallics. Detailed advice should be sought from the pretreatment supplier. Aluminium components should receive a multi-stage chromate conversion coating. Galvanised steel should receive a multi-stage pretreatment using either chromate or zinc phosphate. De-gassing of galvanised steel prior to powder application is considered mandatory.

The following tests were all carried out on 0.8mm chromated aluminium test panels having a nominal coating thickness of 60µm.

TEST	UK SPECIFICATION	ISO/ASTM SPECIFICATION
Cross hatch adhesion	BS3900 E6 – class 0	ISO 2409 – pass Gt0
Impact resistance	BS6496 – pass 20 "lbs	ASTM D 2794 – pass 2.5Nm
Flexibility	BS3900 E11 – pass 6mm	ISO 1519 – pass 6mm
Cupping test	BS3900 E4 – pass 8mm	ISO 1520 – pass 8mm
Scratch/Hardness	BS3900 E2 – pass 4kg	ISO 2815 – min 80 rating
Acetic acid salt spray resistance	BS6496 (15) – pass 1000 hours	ISO9227 – pass 1000 hours
Humidity resistance	BS3900 F2 – pass 1000 hours	ASTM 2247 – pass 1000 hours
Artificial weathering	BS3900 F3 – pass 2000 hours	ISO 11341 – pass 1000 hours
Natural weathering (Florida 45°)	Pass 1 year – minimal colour change, gloss retention > 50%	
Chemical resistance	Resistant to most acids, alkalis and oils at normal temperatures. May be affected by chlorinated solvents.	

Whilst the above information is typical, no warranty is expressed or implied.