

## **HMG Powder Coatings Limited**

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## **Anti-Graffiti Clear Gloss**

857-0S600P-1582

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<b>Product Description</b>	Designed for both exterior and internal use, this powder coating offers excellent corrosion and superdurable weathering resistance, exhibits exceptional smoothness, and has a high hardness.				
	Particularly formulated for use in urban areas, such as street furniture, signs, etc., the coating can be cleaned using xylene, acetone, trichloroethylene or a proprietary graffiti remover. Aerosol paints and marker pens can be removed without staining or damaging the underlying coating				
	The use of the high gloss clear system can either be used without a base colour layer, to protect the underlying substrate without obscuring it; OR, the clear lacquer can be used on a coloured base - tests have shown that the base neither needs to be super-durable nor an anti-graffiti product. This gives the coater the option to convert any colour into a 3 year Florida system with full anti-graffiti properties without the need to stock another range of colours, so reducing inventory.				
Key Benefits	Anti-Graffiti Excellent Hardness Superdurable weathering resistance Excellent clarity Exceptional smoothness				
Powder Properties	Chemistry	Thermosetting hydroxyl functional polyester cured with a multifunctional curing agent.			
	Application	Corona electrostatic and Tribostatic spray.			
	Coating Thickness (DFT)	General recommendation is 60-100 microns (µm), with a minimum thickness of 60 $$ µm.			
	Gloss (ISO 2813)	Gloss (min >90 GU)			
	Specific Gravity	1.21 g/cm <sup>3</sup>			
	Coverage	Up to 14 m²/kg at 60 microns film thickness.			
	Storage & Shelf Life	When stored in a cool (<20°C), dry environment: 12 months.			
	Curing Schedule	15 minutes at 200 Celsius (object temperature) Full cure at 200°C is critical to achieve full surface properties			
Pretreatment	To ensure maximum adhesion the substrate must be thoroughly clean, free from grease, oil, rust, mill scale or any other contaminant. Cleaning may be carried out either by shot blasting, solvent or chemical degreasing. For applications where high corrosion or chemical resistance is required the substrate should be chemically treated prior to powder coating, typically:				
	Ferrous substrates Zinc coated steel Aluminium	iron or zinc phosphate zinc phosphate or chromate conver chromate conversion	rsion		
Mechanical Tests	Unless otherwise specified, all tests were carried out under laboratory conditions on 0.8mm degreased and zinc 1hosphate steel panels. A powder coating DFT of 60-70 microns was used.				
	Hardness	ISO 2815 Buchholtz Indentation	>85		
	Flexibility	ISO 1519 Cylindrical Mandrel	Pass >3mm		
	Adhesion	ISO 2409 2mm Crosshatch	Pass Gt0		
	Cupping	ISO 1520 Erichsen	Pass >4mm		
	Scratch	BS3900: Part E2	2kg: Pass		
	Chip	Nut Fall Test (NEN 5335)	Pass <10mm² peeled off surface layer		

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			<5mm² peeled off ground layer		
Corrosion and Durability	Salt Fog	ISO 7253 (500 hours)	Pass – Corrosion creep <2mm from scratch		
	Mortar Resistance	ASTM C207	Easy to remove. No staining		
	Boiling Water	2 hours boiling water	No defects or detachments		
	Humidity	BS3900: Part F2	Pass. 1000 hours without any effect.		
	Artificial Weathering	QUV-B ISO 11507	After 500 hours. Residual Gloss >50%		
	Exterior Durability	After 3 years Florida exposure, minimal loss of gloss or colour change. No film breakdown or reduction in protective properties			
	Chemical Resistance	Very resistant to detergents. Resistant to most acids, alkalis and oils.			
Graffiti Removal	The anti-graffiti coating, having superior solvent resistance, may be cleaned with a variety of solvents, the choice of which will depend on the type of graffiti encountered. For example:				
	Mild Detergent – Light soiling, shoe polish, lipstick, water-based marker				
	Alcohol, Acetone, Trichloroethylene – Heavy soiling, permanent marker pens				
	Acetone, Trichloroethylene – Aerosol				
	The solvent should be used sparingly and in conjunction with the manufacturer's instructions. After cleaning, do not allow solvent to remain in contact with the coating for a prolonged period. It is recommended that after solvent-based graffiti removal, the surface should be washed with a mild detergent solution (e.g. 5% Teepol) to remove solvent residues.				
Colour Availability	The system is a clear gloss.				
Application Notes	To reduce the chance of yellowing or sagging owing to high film builds, we recommend the product be applied to cold or cool substrates rather than applied hot.				
Restriction of Hazardous Substances (RoHS/RoHS2)	This product conforms to the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations (RoHS and RoHS2) Directive. It does not contain any compounds of lead, mercury, cadmium or hexavalent chromium; nor does it contain polybrominated biphenyls (PBBs) or polybrominated diphenyl ether (PBDE).				
Health & Safety	This product is intended for use only by professional applicators in industrial environments. Consult the relevant health and safety data sheet indicated in the box label before use. This product releases a small (1.5% w/w) amount of $\varepsilon$ -caprolactam on stoving. Care should be taken to ensure adequate ventilation that working concentrations $\varepsilon$ -caprolactam of are kept below $25 \text{mg/m}^3$ .				



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