



KARUMEL PX4600 is a polyester resin based TGIC free type thermosetting powder coatings with excellent weathering resistance.

Recommended use	As a protective and decorative coating for use on electric home appliances, building materials, automobile parts, office equipment, etc. For use on exterior weathering conditions.
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Physical Properties

Finish and Color	Standard Color, Gloss, Colors are available on request.		
Specific gravity	AIR PYCNOMETER METHOD 1.3~1.7 according to color		
Spreading rate (Theoretical)	60 μm dry film thickness 8.0 ~ 10.4 m^2/kg		
FILM PROPERTIES	The data are typical for PX4600 applied to Cold Rolled Steel panels (thickness 0.7 mm) pretreated with Zinc Phosphate, coated with a thickness of ca. 60 μm , and cured at 160 °C (320 °F) for 10 minutes.		
	Property	Test Description	Result
	Adhesion	Cross-cut 100 / 100, 1mm	100 / 100
	Impact	Dupont Impact Tester (1/2" Φ)	1 kg / 30 cm
	Bending	6 mm Mandrel at 180°	No crack
	Erichsen	Erichsen tester	Above 6mm
	Hardness	MITSUBISHI UNI Pencil	HB-F
	Weathering	Weather-O-meter 500hr	Good
	* Values will vary with color.		

Application details

Surface preparation	The surface must be clean and free from rust, dust, oil, grease and other contamination.	
	Types of pre-treatment are recommended as follows:	
	Type	Pre-treatment
	Steel	Iron Phosphate Zinc Phosphate Blasting(the surface to Near-White (SSPC-SP10, Swedish Standard Sa2.5, NACE No.2), profile 38~100 μm
	Aluminum	Chromate
Drying time	The following theoretical curing schedules are recommended to achieve the best performance properties.	
	Temperature	Cure-time
	160°C (320°F)	10 minutes(M.P.T)
	*The cure time may have deviations influenced by various factors.	

Storage and package

Shelf life	Max. 12 months
Storage	Below 25 °C (77 °F) with relative humidity 65% sealed state
Packing Unit	20 kg
Remarks	
Handling	Do not mix the powder with other powder even if it is small amount.
Precautions	Recovered powders should be incorporated with virgin powders for re-use, only after sieving and at a recommended maximum of 30%. Keep the curing condition. Excessive film thickness may result in pinhole.
Note	
1'st issue	2012-04-01
Revision	

Disclaimer : The information in this data sheet is believed to the best of our knowledge based on laboratory test and practical experience. However, there are many factors affecting the performance of product and the product quality itself, so we are not able to guarantee without the confirmation of the purpose of using the product from us in writing. We reserve the right to change the data without notice and you should check that this data sheet is current prior to using the product.

