DuPont Powder Coatings

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Data Sheet

Flamulit® HTC 246 UVF

A DuPont thermoplastic powder coating

Product

Flamulit® HTC 246 UVF is a polyolefin based coating powder with good adhesion, even on aluminium, and improved hardness. This powder is applied by fluidised bed.

Typical appications

Coating of metal parts where good hardness is necessary, for example for street lamps, hooks, containers, etc. **Flamulit® HTC 246 UVF** product is stabilised against UV radiation.

Flamulit® HTC 246 UVF is suitable for applications in contact with potable water as it is approved by the German BVGW (KTW-Genehmigung).

Typical coating conditions

Recommended pre-treatment :
Alkaline degreasing followed by phosphatation and passivation. As a minimum, degreasing with vapour phase chlorinated solvents. For increased mechanical adhesion, we recommend that parts be sand blasted.
Procedure for fluidised bed :

- preheat the metal part at 250-360°C.
- immerse in fluidised bed for 5-6 s.
- bake at 225°C for 3-4 min (cooling in ambient air).

For more informations, see DuPont guidelines for Metal Coating procedures.

Results

Smooth appearance.
Coating thickness :

- 300-600 µm (i.e. 300-600 g/m^2)

Characteristics

General properties	Units	Methods	Values
MFI (190°C/2.16kg)	g/10min	ASTM D 1238	20
Particle size	µm	Alpine	below 250
Brittle point	°C	ASTM D 746	-30
Softening temperature (Vicat)	°C	ASTM D 1525	83
Elongation at break	%	ASTM D 638	100
Coating properties			
Maximum working temperature	°C		65
UV stability	> 85% retained gloss after 2000 hrs UV		(varies according to colour)
Specific gravity of the coating	g/cm3	ASTM D 792	0.91 to 0.94
Salt spray		ASTM B 117 scribed unscribed	corrosion 3 mm from scribe > 2000 hrs
Hardness Shore D		ASTM D 2240	52
Adhesion : squaring		AFNOR T 30-038	no stripping
separation of the tongue		AFNOR T 58-112	no stripping
Electric strength	kV/mm	CEI 243-1	60
Erichsen static stamping	mm	ISO 1520	5
Chemical resistance			
Environmental stress cracking	hrs	ASTM D 1693	poor
Dilute acids	very good (except acetic acid)		
Dilute alkalis	very good		
Solvents	poor		
Mineral salt solutions	good		

Edition of April 01, subject to modifications

For Safety, Health, storage and handling recommendations as well as the disclaimer information, see the DuPont Metal Coating general guideline.