



DuPont Powder Coatings

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Data Sheet

Flamulit[®] HTC 225

A DuPont thermoplastic powder coating

Product description

Thermoplastic **Flamulit[®] HTC 225** is a polyolefin based coating powder with adhesion promoter. It has good scratch resistance, hardness and chemical resistance.

Typical applications

Coating of metal parts where good adhesion and good chemical resistance are required. **Flamulit[®] HTC 225** is adapted for inside coating of fire extinguishers lining in accordance with EN3. It can also be applied for containers, pipes, ...

Typical coating conditions

Pre-treatment (recommendations) :

Minimum treatment would be degreasing with alkaline detergents. Degreasing might be follow by phosphatation and passivation.

For increased mechanical adhesion, we recommend sand blasting.

Primer: Not required

Application (e.g. for fire extinguishers):

- preheat the substrate up to 240-280°C / 80 seconds, depending on metal thickness.
- Coating by rotational lining with a dwell time for melting of 30 seconds.

External thermosetting coating (fire extinguishers)

This coating is applied subsequently. Curing conditions for the external layer depend on the type of product.

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

Results

Smooth appearance coating.
Coating thickness: 500-1000 µm.

Characteristics

General properties	Units	Methods	Values
MFI (190 °C/2.16kg)	g/10min	ASTM D 1238	5
Particle size	µm	Alpine	< 315
Brittle point	°C	ASTM D 746	-40
Softening temperature (Vicat)	°C	ASTM D 1525	101
Elongation at break	%	ASTM D 638	450
Coating properties			
Maximum working temperature	°C		60
UV stability	>2000 hrs UVA at 60°C >2000 hrs UVB 8h/60°C, 4h/50°C		without significant damage slight gloss reduction
Specific gravity of the coating	g/cm ³	ASTM D 792	0.92 to 0.94
Salt spray		ASTM B 117 scribed unscribed	Corrosion 17 mm after 1000 h > 2000 hrs without damage
Hardness Shore D		ASTM D 2240	57
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	> 20
Erichsen static stamping	Mm	ISO 1520	8
Chemical resistance			
Environmental stress cracking	Hrs	ASTM D 1693	good
Dilute acids	Very good		
Dilute alkalis	Very good		
Solvents	Good		
Mineral salt solutions	Very 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.