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**Data Sheet**

**Abcite® X2070**

A DuPont powder coating resin

**Product description**

**Abcite® X2070** is a hard chip-resistant thermoplastic powder coating that provides excellent corrosion and UV protection without the need for a primer. It is designed for fluidised bed and hot flocking applications.

**Abcite® X2070** are based on DuPont *Surlyn®* resin, the same polymer used for the tough outer surface of *golf balls*.

**Chemical Resistance**

**Abcite® X2070** has excellent resistance to chemical attack by both acids and alkalis. It is also highly resistant to permeation by liquids.

Application-specific chemical resistance testing is recommended. Further detailed chemical resistance information may be obtained from DuPont.

**Typical applications**

**Abcite® X2070** is particularly suitable for outdoor, light poles, signs posts, street and garden furniture, balustrades, railings and trellis of stairways, fencing panels, bike racks, automotive, supermarket carts, ... where outstanding hardness is required.

*For more information, see DuPont summary guidelines for Metal Coating procedures.*

**Characteristics**

Powder properties	Unit	ASTM test method	Value
Particle Size Distribution	µm	Alpine	< 315
Bulk density (Natural)	g/cm <sup>3</sup>	D1895 (test 89)	0.35
Bulk density (White)	g/cm <sup>3</sup>	D1895 (test 89)	0.38
Coating properties			
Specific Gravity (Natural)	g/cm <sup>3</sup>	D792	0.96
Impact Strength: 23 °C/-40 °C	kJ/m <sup>2</sup>	D1822	614/416
Abrasion Resistance (Taber)**	mg wt loss	D4060	14 mg/1000 cycles
Salt Spray Resistance		B117-73(5% common salt in water at 35°C)	< 7mm after 2'000h
Subsurface corrosion of scribed panel	mm		
Weathering, 2000 h Exposure		G53	> 2'000h (no micro-cracks)
Gloss, 20°*		D523	60
Burning Behaviour		UL94	V0 (on coated steel plate)
Flammability	mm/min	D635	13.6
Electrical / Mechanical / Thermal Properties			
Hardness	Shore D	D2240	65
Elongation at Break E <sub>B</sub>	%	D638	290
Tensile Strength	MPa	D638	27
Vicat Softening Point	°C	D1525	52
Melt Flow Index (MFI) -190°C/2.16 kg	g/10 min	D1238	32
Brittleness temperature	°C	D 746	< -100
Thermal conductivity	W/mK	E1530	0.28
Dielectric breakdown (kV)	KV/mm	D149	62
Volumetric resistivity	Ohm/cm	D257	2.4x10 <sup>12</sup>

\* **Abcite® X2070 FWH**

\*\* 3.175 mm thick compression molded sample, wheel = CS-10, wt = 1000 grams.

Test Conditions : tests were performed using ST 37 steel panels coated by the fluidised bed process (thickness of 400-600 µm) or film samples. Unless otherwise stated, all data relates to **Abcite® X2070 FNA** . The results may vary for other colours or thickness.

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