



DuPont Powder Coatings

DuPont Polymer Powders Switzerland Sàrl  
Rue St-Joseph 25 / P.O. Box 140  
CH-1630 Bulle 1

**Data Sheet**

**Abcite® X60**

A DuPont powder coating resin

**Product**

**Abcite® X60** is a tough 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® X60** is based on DuPont *Surlyn®* resin, the same polymer used for the tough outer surface of *golf balls*.

**Chemical Resistance**

**Abcite® X60** 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® X60** is particularly suitable for outdoor, light poles, signs posts, street and garden furniture, balustrades, railings and trellis of stairways, fencing panels, bike racks, water transportation, ... where increased hardness and adhesion is required.

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

**Characteristics**

Powder properties	ASTM Standard	Unit	Value
Specific Gravity (Natural)	D792	g/cm <sup>3</sup>	0.94
Particle Size Distribution	-	µm	<125
Bulk density (Natural)	D1895 (test 89)	g/cm <sup>3</sup>	0.39
Bulk density (White)	D1895 (test 89)	g/cm <sup>3</sup>	0.41
Coating properties			
Impact Strength: 23 °C/-40 °C	D1822	kJ/m <sup>2</sup>	760/640
Adhesion	D429, (B)	kg/cm	6.3
Abrasion Resistance*	D1630	NBS Index	130
Abrasion Resistance (Taber)**	D4060	mg wt loss	17 mg/1000 cycles
Salt Spray Resistance* Subsurface corrosion of scribed panel	B117-73(5% common salt in water at 35 °C)	mm	< 2 at 3600 hrs
Condensation resistance Subsurface corrosion of scribed panel	DIN 50017-KK 40 °C, 100% rel. hum.	mm	< 2 at 1000 hrs
Weathering, 2000 hr Exposure	G53	% Gloss Reduction	< 20 %
Gloss, 20°*	D523		84
Burning Behaviour Flammability	UL94 D635	mm/min	VO 14.6
Electrical / Mechanical / Thermal Properties			
Hardness	D2240	Shore D	58
Elongation at Break E <sub>B</sub>	D638	%	460
Tensile Strength	D638	MPa	23
Melting Point	D3418	°C	93
Vicat Softening Point	D1525	°C	63
Melt Flow Index (MFI) (190 °C/2.16 kg)	D1238	g/10 min	23
Brittleness temperature	D 746	°C	< -100
Thermal conductivity	E1530	W/mK	0.25
Dielectric strength E <sub>d</sub> **	D149	KV/mm	38
Volumetric resistivity	D257	Ohm/cm	10 <sup>12</sup>

\* **Abcite® X 1060 WH**

\*\* 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® X 1060 NA**. The results may vary for other colours or thicknesses.

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



DuPont Powder Coatings

DuPont Polymer Powders Switzerland Sàrl  
Rue St-Joseph 25 / P.O. Box 140  
CH-1630 Bulle 1