

# Abcite® X1060

A DuPont powder coating resin

## Product description

**Abcite® X1060** 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® X1060** is based on DuPont *Surlyn®* resin, the same polymer used for the tough outer surface of *golf balls*.

## Chemical Resistance

**Abcite® X1060** 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® X1060** 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 summary guidelines for Metal Coating procedures*

## Characteristics

Powder properties	Unit	ASTM test method	Value
Specific Gravity (Natural)	g/cm <sup>3</sup>	D792	0.94
Particle Size Distribution	µm	-	< 315
Bulk density (Natural)	g/cm <sup>3</sup>	D1895 (test 89)	0.38
Bulk density (White)	g/cm <sup>3</sup>	D1895 (test 89)	0.41
Coating properties			
Impact Strength: 23°C/-40°C	kJ/m <sup>2</sup>	D1822	760/640
Abrasion Resistance (Taber)**	mg wt loss	D4060	17 mg/1000 cycles
Salt Spray Resistance* Subsurface corrosion of scribed panel	mm	B117-73(5% common salt in water at 35°C)	< 2 at 3600 hrs
Weathering, 2000 hr Exposure	% Gloss Reduction	G53	< 20 %
Gloss, 20° *		D523	84
Burning Behaviour Flammability	mm/min	UL94 D635	V0 (on coated steel plate) 14.6
Electrical / Mechanical / Thermal Properties			
Hardness	Shore D	D2240	58
Elongation at Break E <sub>B</sub>	%	D638	460
Tensile Strength	MPa	D638	23
Melting Point	°C	D3418	93
Vicat Softening Point	°C	D1525	63
Melt Flow Index (MFI) -190°C/2.16 kg	g/10 min	D1238	23
Brittleness temperature	°C	D 746	< -100
Thermal conductivity	W/mK	E1530	0.25
Dielectric strength E <sub>d</sub> **	KV/mm	D149	38
Volumetric resistivity	Ohm/cm	D257	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 thickness.

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