

AFS PE Powder Coating Resin Raw Material Data

All materials are suitable for coating metal, galvanized metal, aluminium, wood, plastics (HDPE,PP, and others), concrete. The coating maintains excellent adhesion by chemical bonding without need of separate adhesive primer on degreased (and for metal sand-blasted) substrates.

Product Code	AFS 1 PE	AFS 2 PE	AFS 3 PE
Recommend. coating thickness	<3mm	<5mm	
Substrate < 5mm preheat. temp.	110-130°C	120-140°C	
Substrate > 5mm preheat. temp.	130-150°C	140-160°C	
Oven preheat. temp. >20mm	140-150°C	140-150°C	
Solvent Free, Halogen free	Yes	Yes	
Environmetal friendly	Yes	Yes	
VOCs (volatile org. chemicals)	No	No	
Toxicity Index NES 7	1.8	1.8	
Particle Size	<250 microns	<300 microns	
Max Service Temp (°C)	60°C	60°C	
Corrosion Resistance	excellent	excellent	
Acids Chemical Resistance	excellent	excellent	
Solvents Cemical Resistance	best in class	best in class	
Alkali Cemical Resistance	excellent	excellent	
UV Resistance	15-50 years	15-50 years	
Salt Spray Resistance (scribed)	<2mm (1000 hrs)	<1mm (/1000 hrs)	
Impact strength ISO 6272 23°C	2.7 Joule	3.5 Joule	
Impact strength ISO 6272 0°C)	18.0 Joule		
Taber Abrasion Resistance (wt. Loss/1000 cyles)	60mg	50mg	
Edge Covering	excellent	exellent	
Soft Touch	yes	yes	
Positive List for Food Contact	yes	yes	
Positive List for Potable Water	yes	yes	
Fire Resistance (UL 94)	V0	V0	
MFI (190°C/2,16 kg)	60	23	
Melting point (°C)	90°C	90°C	
Substrate adhesion [N/mm2]	>7	>8	
Hardness (Shore D)	44	53	
Tensile Strength ISO 527 MPa	12	17	
Elongation at break ISO 527 (%)	800%	700%	
Brittleness Temperature	-78°C	-76°C	
Melting Point	105°C	105°C	
ESCR ASTM D1693	>1000 hrs	>1000 hrs	
Specific gravity (g/cm³)	0.95	0.95	
Dielectric strength (kV/mm)	47	39	