

For best results always check manufacturers data before application

Product	Alkyd	Bitumen	Chlor. Rubber	Coal Tar Epoxy (2 pack)	Epoxy Ester	Ethyl Silicate	Grease Coatings	Pure Epoxy (2 Pack)	Pure Urethane (1 Pack)	Silicone Alkyd	Solution Vinyl	Urethane Acrylic	Urethane Acrylic
Resistance to UV Light	Good	Chalks	Chalks	Chalks	Chalks Badly	N/A	Good, High Dirt Pickup	Chalks	High, low chalking – aliphatic grade	Exceptional - low chalking	Chalks	Very High - low chalking	Good
Resistance to Water Immersion	Poor	Fair in Fresh Water	Excellent	Excellent	Fair	Excellent when Sealed	Very Good	Very Good	Very Good	Fair	Very Good	Very Good	Very Good
Resistance to Mechanical Damage	Fairly Good	Fair	Fair	Good	Good	Very Good	Very Poor	Excellent	Very Good	Fairly Good	Very Good	Excellent	Very Good
Resistance to Oils (2)	Fair	Not Resistant	Permanently Softened	Good	Excellent	Excellent but may be absorbed	Not Resistant	Excellent	Excellent	Excellent	Good	Excellent	Excellent
Curing Agent	Oxygen	N/A	N/A	Polyamide or Isocyanate Adduct	Oxygen	Zinc Dust & Moisture	N/A	Polyamide or Isocyanate Adduct	Moisture (min 35% Humidity)	Oxygen	N/A	Aliphatic or Aromatic Isocyanate	Primer = Aromatic Isocyanate Top Coats=Aliphatic Isocyanate
Drying Mechanism	SE & OX	SE	SE	SE & CC	SE & OX	SE & CC	SE	SE & CC	SE(1)	SE & OX	SE	SE & CC	SE & CC
Intercoat Adhesion (coat on coat) – aged	Good with Tie Coat	Excellent	Excellent	Poor	Good with Tie Coat	Poor	Excellent	Good with Tie Coat	Good with Tie Coat	Good	Excellent	Good (not gloss-on-gloss)	Good
Temperature Resistance Dry Continuous (cured film)	90°C	70°C	70°C	90°C	100°C	450°C	50°C	110°C	120°C (Not Thermo Plastic)	120°C	80°C	120°C (Not Thermo Plastic)	120°C
Chemical Resistance	Poor	Poor	Excellent	Good	Good	Poor	Good	Excellent	Very Good	Good	Very Good	Very Good	Good
Solvent Resistance (aged)	Fair	Poor	Poor	Good – Pitch Bleed Can Occur	Good	Excellent	Good	Excellent	Very Good	Good	Fair	Very Good	Good
Resistance to Vapour Permeation	Fairly High	High	Very High	Very High	High	Low	Very High	Very High	Fair	High	High	Low	Low
Minimum Application Temperature	4°C	0°C	0°C	10°C	4°C	5°C	4°C	Min 5°C(3)	<0°C	4°C	0°C	<0°C	<0°C
Colour Availability	Full Range	Black / Brown	Full Range	Black / Brown / Grey	Full Range	Grey Primer	Full Range	Full Range	Full Range	Full Range	Full Range	Full Range	Full Range

SE = Solvent Evaporation  
OX = Oxidation  
CC = Chemical Cure

(1) = Reaction with Moisture Necessary  
(2) = Check with Manufacturer  
(3) = Isocyanate cure types down to 0°C

Courtesy of Fitz Atlas – [www.fitz-coatings.com](http://www.fitz-coatings.com) Peter G Morgan – Lithgow Associates – [www.lithgow.co.uk](http://www.lithgow.co.uk) & MPI Group [www.mpigroup.co.uk](http://www.mpigroup.co.uk)