

# Polynat<sup>®</sup> (PT-nat<sup>®</sup>) - oil free polyester resins

Product Code	NVC (%)	Solvent	Max. acid value	Typical viscosity @ 25°C (poise)	Hydroxyl value	Hydroxyl content (%)	Type	Features/ application(s)
PE101	60	Solvesso100/ Butyl Glycol	10	18	64	1.95	Slightly branch	For topcoat and mono-coating coil coating application. Also suitable for general Industrial stoving paint. Good flexibility and durability.
PE116	65	Solvesso100/ Butyl Glycol	10	27	50	1.5	Slightly branch	Coil and can coating for topcoat and baking coat formulation. Good flexibility and exterior durability.
PE118	65	Solvesso100/ Butyl Glycol	10	35	50	1.5	Slightly branch	Suitable for metallic basecoat and auto refinish binder formulation. General stoving paint application.
PE126	55	Solvesso150	5	40	33	1	Linear	For coil coating polyester primer and mono-coat application.
PE135	70	Solvesso100/ Butyl Glycol	10	35	63	1.9	Slightly branch	For topcoat and mono-coat coil coating application. High reactivity and high solid formulation. Also suitable for general Industrial use.
PE136	60	Solvesso100/ Butyl Glycol	10	75	26	0.8	Linear	For can white and varnish coating application. Suitable for coil coating primer and mono-coat formulation.
PE139	65	Butyl Glycol	12	30	56	1.7	Slightly branch	For coil coating topcoat formulation. High film formation Tg, good gloss and good dirt pickup performance.
PE147	70	Solvesso 100/ Butyl Glycol	10	33	59	1.8	Slightly branch	For coil coating mono-coat formulation. Flexible and good outdoor durability.

<b>PE178</b>	65	Solvesso 100/ Butyl Glycol	10	35	62.7	1.9	Slightly branch	For coil coating topcoat formulation with good film formation. High cured film Tg, excellent outdoor durability with good dirt pickup.
<b>PE154</b>	60	Solvesso 100 /Butyl glycol	10	15	62	1.9	Slightly branch	Very good hardness and flexibility. Excellent outdoor durability. Good compatibility with CAB. Suitable for OEM stoving and metallic basecoat formulation.
<b>PE157</b>	60	Solvesso 150/ Butyl glycol	10	100	26.5	0.8	linear	Good flexibility, adhesion, forming characteristic and low baked system. Suitable for coil and can coating formulation.
<b>PE165</b>	70	Solvesso100/ Xylene/Butyl glycol	10	70	62	1.9	Slightly branch	Excellent outdoor durability and flexibility. Good compatibility with CAB. Suitable for OEM stoving and metallic basecoat formulation.

## Polycryl<sup>®</sup> (PT-cryl<sup>®</sup>) - acrylic resins - thermoplastic

Product Code	NVC (%)	Solvent	Max. acid value	Typical viscosity @ 25°C (poise)		Features/ application(s)
<b>TA581</b>	40	Toluene	10	25		Fast dry and early hardness development with good abrasion resistance. Excellent solvent and chemical resistance. Suitable for industrial metal, wood and plastic formulation.
<b>TA599</b>	55	Solvesso 100	15	50		Excellent adhesion, hardness and fast dry. Suitable for primer formulation direct on galvanized, aluminium and steel substrate.
<b>TA5101</b>	55	Solvesso 100	25	55		Excellent adhesion to many substrates including galvanized metal. Suitable for top coating and primer formulation for 1K system.

# Polygel<sup>®</sup> (PT-gel<sup>®</sup>) -acrylic thixotropic resins

Product Code	NVC (%)	Solvent	Max. acid value	Appearance	Type	Features/ application(s)
WGA824	30	Butyl glycol	10	Milky white	Polyester copolymer	Good anti setting properties for pigmented in emulsion formulation. Good in metallic orientation system for water-based metallic basecoat combined with suitable resin. Can be applied in stoving and force dry system.
GA828	50	Xylene/ PMA/ Butyl acetate	10	Milky white	SCA Acrylic copolymer	Good compatibility with many resins system including epoxy resin. Excellent anti sag and anti-settling performance. Good metallic orientation. Suitable for stoving and air-dry basecoat formulation.
GA802 X35	35	Xylene	10	Clear	Acrylic	Good anti settling property. Good compatibility and suitable for clear coat system especially for vertical application to achieve high build property. The strong thixotropy index has make GA802 also suitable to be used in high polar system such as artificial marble where acrylic monomers are the main binder system. GA802 mixture pump able and flow able during manufacturing process .
GA807 BP35	35	Butyl Acetate / PMA	10	Translucent	Acrylic	Excellent solvent release and durability used for metallic orientation control without wax dispersion and also for wet on wet system. Suitable to be used in stoving basecoat with combination of polyester or acrylic melamine system. Good vertical spray and hold out of metallic basecoat.
GA808 X30	30	Xylene	15	Clear	Acrylic	Good anti settling property. Good compatibility and suitable for acrylic PU clear coat system especially for vertical application to achieve high build property. Suitable for stoving system. Brush or roller application for non leafing aluminium formulation.
GA 810 B30	30	Butyl Acetate	15	Milky White	Acrylic	Ease dispersibility type, excellent solvent release and durability used for metallic orientation control without wax dispersion and also for wet on wet system. Also, suitable as sole resin for binder formulation in refinishing.

# Polyadd<sup>®</sup> (PT-add<sup>®</sup>) – Polymer Additive

## Polyadd<sup>®</sup> (PT-add<sup>®</sup>) – Dispersing additive

Product Code	Active ingredient (%)	Solvent	Max. acid value	Amine value	Type	Features/ application(s)
AD1	70	Xylene	5	80-100	Co-polymer	Very strong pigment wetting for inorganic and carbon black. Reduce dispersing time, improve gloss and color strength.
AD12	100	-	15	80-100	Co-polymer	Very strong pigment wetting for inorganic and carbon black. Reduce dispersing time, improve gloss and color strength.
AD30	100	-	15	70-100	Polyacrylate	Highly efficient pigment wetting additive. Broad compatibility and recommended for direct grinding. Suitable for pigment paste formulation usage.
WAD32	98	-	5-15	15-25	Copolymer	Multi-purpose pigment wetting additive. Wide range of compatibility with many types of coating resin. Suitable for solvent and water-based pigment paste formulation usage.
AD34	50	Xylene/ Methoxy propyl acetate	50	-	Copolymer	Very strong pigment wetting for TiO <sub>2</sub> and inorganic extender. Reduce dispersing time, improve gloss and color strength.
AD35	60	Methoxy propyl acetate	10	30-100	Polyacrylate	Multi-purpose pigment wetting additive. Wide range of compatibility with many types of coating resin. Suitable for pigment paste formulation usage.

Polyadd <sup>®</sup> (PT-add <sup>®</sup> ) – Defoamer additive						
Product Code	Active ingredient	Refractive index	Flash point (°C)	Density @25°C	Type	Features/ application(s)
WDF5	Alkyl benzene	1.495	40	0.88	Silicone	Excellent defoaming performance in water reducible, dispersion and emulsion formulation. Suitable in pigment paste formulation.
WDF50	-	1.451	-	0.98	Non silicone	Strong defoaming for high solid water base and emulsion system.
WDF54	-	1.336	-	0.95	Non silicone	Excellent defoaming property. Suitable for general defoaming purpose on all emulsion and dispersion system.
Product Code	Active ingredient	Solvent	Flash point (°C)	Density @25°C	Type	Features/ application(s)
Polyadd <sup>®</sup> (PT-add <sup>®</sup> ) – Wetting and levelling additive						
AL 21	50	Alkyl benzene/ Butyl acetate	47	0.94	Polyacrylate	Good levelling performance and suitable for all gloss level. Can be used in coil and can formulation. Recoatability and no foam stabilization effect.
Polyadd <sup>®</sup> (PT-add <sup>®</sup> ) – Miscellaneous additive						
THX 6	6	Xylene/ Butyl acetate/ butanol	27	0.86	EVA copolymer dispersion	Improve orientation of metallic pigment, enhance flip flop effect. Improve in can anti settling performance.