Powlex® Resin for TGIC Systems

PRODUCT Name	Ratio	Overbake Stable	Tribo	AV	Viscosity (cP)	Tg (^{0}C)	Cure T (^{0}C)/ t (min)	Purpose
T201-3	90/10	•	•	47-55	3000-5500	approx.67	180/10	For matte powder coatings by blending dry with T204-3
T207-2	93/7	•		30-36	4250-5500	approx. 67	200/10	Low reactive resin, excellent flow, overbake resistance.
T207-3	93/7	•	•	30-36	4250-5500	approx. 67	200/10	Tribo version of T207-2
T204-3	96/4	•	•	21-26	6000-8500	approx. 60	200/10	For matte powder coatings by dry blending with T201-3
T187-3	93/7	•	•	30-36	4250-5500	approx. 67	180/10	Accelerated version of T207-3
T187-5	93/7	•	•	35-41	3000-4600	Approx.67	180/10	Suitable for Wrinkle applications
T167-3	93/7	•	•	30-36	3000-4000	approx.60	160/10	High reactivity, good flow and mechanical properties.

Powlex® Resin for β-HAA Systems

Industrial & Durable Resins

PRODUCT Name	Ratio	Gas Oven Stable	Overbake Stable	Tribo	AV	Viscosity (cP)	Tg (^{0}C)	Cure T (^{0}C)/ t (min)	Explanation
P183-2	97/3	•	•		20-25	5400-8200	approx.62	180/10	For matte powder coatings by dry blending with P187 and P181
P183-3	97/3	•	•	•	20-25	5400-8200	approx.62	180/10	Tribo version of P183-2. For matte powder coatings by dry blending with P187 and P181
P184-2	96,5/3,5	•	•		21-25	5600-8100	approx.61	180/10	For low level Primid, excellent flow, overbake and gas oven resistance.
P184-3	96,5/3,5	•	•	•	21-25	5600-8100	approx.61	180/10	Tribochargeable version of P184-2
P185-2	95/5	•	•		30-36	2500-3500	approx.60	180/10	Excellent weathering and very good flow. Overbake and gas oven resistance.
P185-3	95/5	•	•	•	30-36	2500-3500	approx.60	180/10	Tribochargeable version of P185-2

P187-0	93/7				49-54	3000-5500	approx.58	180/10	For matte powder coatings by dry blending with P183
P187-3	93/7	•	•	•	49-54	3000-5500	approx.58	180/10	Tribo activated version of P187-0. For matte powder coatings by dry blending with P183
P181-0	90/10				75-85	1000-3000	approx.58	180/10	For matte powder coatings by dry blending with P183
P181-3	90/10	•	•	•	75-85	1000-3000	approx.58	180/10	Tribo version of P181-0 For matte powder coatings by dry blending with P183
AP185-3	95/5	•	•	•	33-37	2300-3600	approx.54	180/10	Enhanced architectural β-HAA resin , excellent flow and degassing properties up to 160 microns. Overbake and gas oven resistance.
P165-3	95/5	•	•	•	34-38	2500-4500	approx.56	160/10	Low temperature curable β-HAA resin for industrial application. It is non-blooming
P157-3	93/7	•	•	•	45-51	4300-7300	approx.58	150/15	Low bake resin when 7% HAA is used

Superdurable Resins

PRODUCT Name	Ratio	Gas Oven Stable	Overbake Stable	Tribo	AV	Viscosity (cP)	Tg (^{0}C)	Cure T (^{0}C)/ t (min)	Explanation
SP183-0	97/3				18-22	3500-5500	approx. 60	200/10	Dry blended with SP188-0 to obtain 30 gloss surface
SP185-0	95/5				30-36	3000-4400	approx.59	190/10	Superdurable resin with good mechanical properties. It can be formulated with both β-HAA and TGIC. It has blooming resistance
SP185-3	95/5	•	•	•	30-36	3000-4400	approx.59	190/10	Tribo version of SP185-0
SP188-0	92/8				49-54	4500-6600	approx. 64	200/10	Dry blended with SP183-0 to obtain 30^0 gloss surface

One-Shot Resins

PRODUCT Name	Ratio	Gas Oven Stable	Overbake Stable	Tribo	AV	Viscosity (cP)	Tg (^{0}C)	Cure T (^{0}C)/ t (min)	Explanation
DM204-0					23-27	5000-6400	approx. 58	200/10	Slow reactive component for dull Matte One Shot (5-10 gloss)
DM201-0					88-92	2700-4600	approx. 62	200/10	Fast reactive component for dull Matte One Shot (5-10 gloss)

Powlex® Resin for Hybrid Systems

PRODUCT Name	Ratio	Overbake Stable	Tribo	AV	Viscosity (cP)	Tg (^{0}C)	Cure T (^{0}C)/ t (min)	Explanation
H204-0	60/40			55-65	1800-3200	approx.54	200/10 180/20	Low reactive resin, it can be also formulated as 50/50

H204-3	60/40	•	•	55-65	1800-3200	approx.54	200/10 180/20	Tribochargeable version of H204-0
H184-3	60/40	•	•	55-65	2000-3300	approx.54	180/10 160/20	Medium reactive resin, it can be also formulated as 50/50
H183-0	70/30			30-36	4000-5500	approx.57	180/10	Medium reactive resin, very good flow and mechanical properties
H183-3	70/30	•	•	30-36	4000-5500	approx.57	180/10	Tribochargeable and overbake version of H183-0
H183A-2	70/30	•		30-36	4000-6000	approx.58	180/10	High performance and good flow properties
H183A-3	70/30	•	•	30-36	4000-6000	approx.58	180/10	Tribo Version of H183A-2
H163-3	70/30			32-42	3000-6000	approx.52	160/10 140/20	High reactive resin, tribochargeable and non-blooming
H164-3	60/40			55-65	2000-3300	approx.54	160/10 140/20	Low temperature curable resin, it can be also formulated as 50/50
H145-0	50/50			66-75	3000-7000	approx.51	160/5 140/10	High reactive and good flow resin for MDF coating

Powlex® MASTERBATCH ADDITIVES

Masterbatches for Powder Coatings

PRODUCT Name	AV	Viscosity (cP)	Tg (^{0}C)	Explanation
POWLEX C	32-38	2600-3900	N/A	5% Catalyst containing masterbatch for hybrids, TGIC or PT 910
POWLEX F	32-42	1600-3000	approx.56	5% Flow agent containing masterbatch for applications of clear powder coatings

GLOSSARY

Acid Value (mg KOH/gr)	The amount of KOH necessary to neutralize the acid content in one gram of polyester.
Blooming	A hazy appearance on the surface of the coating by migration of low molecular weight material during low temperature cure or extended exposure to heat.
Epoxy Equivalent Weigth (EEW)	The weight of resin containing one gram-equivalent of epoxy.
Glass Transition Temperature (Tg)	The characteristic temperature in °C of an amorphous polymer corresponding to the change from a solid to liquid state as measured by DSC.
Hydroxy Value (OH V)	The amount of KOH equivalent to the hydroxyl content of one gram of polyester.
Low Bake	A property of baking using temperatures in below 160^0C
Matte	A coating appearance that reflects a minimal amount of light.
Ratio	Weight ratio between the polyester resin and the hardener
Storage Stability	Ability of powder coatings to maintain free flow powder properties after being subjected to a specified storage condition.
Superdurable	A polyester resin that exhibits extended outdoor weathering characteristics, typically maintaining > 50 % gloss retention after 3 years (EU) and min. 30% gloss retention after 5 years (US) exposed in Florida
Wrinkle	A unique, special effect characterized with ridge-like structures.