



**SIR INDUSTRIALE** SpA

**SIRION - Additives**

## PHENOLIC HARDENERS FOR POWDER COATINGS

PRODUCT	GARDNER VISCOSITY AT 25°C	MELTING RANGE (°C)	HYDROXYL EW (g/eq)	TG (°C)	DESCRIPTION
VP 2080	H-M	60 – 70	< 250 +/- 30	54	Solid reaction product of liquid epoxy resin (LER) and BPA, with a polyacrylate flow modifier and curing accelerator. Ideal for high-gloss, decorative, and protective powder coatings with moderate reactivity. Fully compatible with epoxy resins.
VP 2081	H-M	60 – 70	< 250 +/- 31	50	Phenolic Hardener Solid reaction product of liquid epoxy resin (LER) and BPA, with a polyacrylate flow modifier and curing accelerator. Fully compatible with epoxy resins, it's ideal for high-gloss, decorative, and protective powder coatings with medium reactivity.
VP 2082	H-M	60 – 70	< 250 +/- 32	50	Phenolic Hardener Solid reaction product of liquid epoxy resin (LER) and BPA, with a polyacrylate flow modifier and curing accelerator. Fully compatible with epoxy resins, it can be formulated into protective or decorative powder coatings. Features relatively high reactivity.
VP 2083	H-M	60 – 70	< 250 +/- 33	47	Phenolic Hardener Solid reaction product of liquid epoxy resin (LER) and BPA, with a polyacrylate flow modifier and curing accelerator. Fully compatible with epoxy resins and designed for powder coatings, it features very high reactivity..
VP 2084	H-M	60 – 70	< 250 +/- 34	50	Phenolic hardener for powder coating, derived from unmodified epoxy resin and BPA. Compatible with epoxy resins, it offers medium reactivity and can be used for protective or decorative coatings.
VP 2085	H-M	60 – 70	< 250 +/- 35	52	Phenolic hardener made from unmodified epoxy resin and BPA, designed for powder coating. Fully compatible with epoxy resins, it can be used in protective or decorative coatings. It contains no curing accelerator or flow modifier and optimizes reactivity in formulations with existing curing accelerators.

## ADDITIVES FOR POWDER COATINGS

PRODUCT	APPEARANCE	MELTING RANGE (°C)	PARTICLE SIZE	DESCRIPTION
VP 1016	light yellow flakes	105 – 117	< 2 mm	Matting agent for powder coatings based on triglycidylisocyanate and epoxy/polyester hybrids
VP 1035	light yellow flakes	80 – 100	< 180 µm	Matting agent for powder coatings based on epoxy/polyester hybrids
VP 1110	white flakes	80 – 100	< 2 mm	Accelerator to increase the reactivity in hybrids, polyester/TGIC, polyester/epoxy ester
VP 1115	white flakes	80 – 100	< 8 mm	Additive indicated to prevent yellowing of powder coatings during curing in presence of NOx (gas oven)

## Polyester and FRP

PRODUCT	SOLID CONTENT	DENSITY AT 25°C (g/ml)	DOSAGE	DESCRIPTION
FG 1055	8,5	0,87	0,1 – 1% based on total mixture quantity	Silicone-free, anti-foam polymer-based additive for wood coatings
FG 1550	10	0,87	0,1 – 0,5% based on	Silicone-free, anti-foam polymer-based additive
FG 1555	40	0,88	0,1 – 0,5% based on	Silicone-free, anti-foam polymer-based additive
FG 3706	50	–	0,5 – 1,5% based on resin quantity	Solution of polyacrylate. Flow agent for UPR, PU and solvent-free epoxy
FG 1740	–	–	0,2 – 0,7% based on resin quantity	Styrene-emission reduced additive for orthophthalic polyester resins
FG 1750	–	–	0,2 – 1% based on resin quantity	Styrene-emission reduced additive for isophthalic & DCPD polyester and vinylester resins
FG 3909	–	–	0,5 – 1,5% based on filler quantity	Solution of boric acid ester. Wetting and dispersing additive for UPR

## HARDENER FOR EPOXY (CAN & COIL)

PRODUCT	ACID VALUE (mg.KOH/gr)	SOLID CONTENT (%)	SOLVENT	DESCRIPTION
VP 1080 C 40	170-210	40	Cyclohexanone	In combination with high MW epoxy resins is suitable for can&coil coatings. It provides very high chemical and thermal resistance. FDA 21 CFR 175.300 and 10/2011 CE compliant

## FLOW AND LEVELLING AGENT

PRODUCT	BROOKFIELD VISCOSITY (cP)	SOLID CONTENT	DESCRIPTION
VP 1030	1000-3000 at 150°C	>98%	Homopolymer of butyl acrylate. Flow and levelling agent. Indicated for the preparation of polyester resins and solid epoxy resins masterbatches
VP 1040	2000 at 75°C / 800 at 100°C	> 98,5%	Higher MW of VP 1030

## ADDITIVES FOR THE INDUSTRY

### Epoxy systems

PRODUCT	SUGGESTED AMOUNT	DESCRIPTION
2501	0,2 – 1% on total formulation	Silicone-free defoamer and air release agent for solvent and solvent-free coatings
2524	0,1 – 1% on total formulation	Defoamer and air release agent for water based coatings
2530	0,4 – 1% on total formulation	Silicone-free defoamer and air release agent for solvent and solvent-free coatings
2541	0,2 – 1% on total formulation	Silicone-free defoamer and air release agent for solvent and solvent-free coatings
2705	0,5 – 2% on total formulation	Wetting and dispersing additive for epoxy filled resins.