



## ASUHI PRODUCTS AND ANALOGUES THEREOF

Type	Application	Characterization	Analogues
<b>Hardener curing agent</b>			
<b>TGIC</b>	Hardener for pure polyester powder coating system	Good heat resistance, weather resistance and high temperature stability, use level at 7-9% of polyester weight	/
<b>HAA</b>	Hardener for pure polyester system, $\beta$ -hydroxyalkyl amides.	excellent mechanical properties, good weather durability, Non-toxic	Primid XL552 (EMS)
<b>HC31</b>	Hardener for epoxy powder coatings, 2-Phenyl imidazoline.	Low temperature curing at 140°C, Use level at 6-7% of the epoxy resin's weight	Vestagon B31 (Degussa)

Type	Application	Characterization	Analogues
<b>Matt hardener / Matting agent</b>			
<b>HC68</b>	Matt hardener for pure epoxy, hybrid powder coating system	2% of gloss at least, Use level at 8-10% of epoxy resin's weight,	Vestagon B68 (Degussa)
<b>HC55</b>	Matt hardener for pure epoxy, hybrid powder coating system	Above 10% of gloss, Use level at 6-8% of epoxy resin's weight, applied to semi-gloss powder coating	Vestagon B55 (Degussa)



HM3327	Matting agent for hybrid powder coating system	Wax-free, achieve 5% gloss at least, has better anti-yellowing and leveling properties with exquisite appearance, dosage at 1-5% of total weight.	Epomatt 152 (Estron)
HM3328	Matting agent for hybrid powder coating system	Physical matting agent with wax-free, 6% of gloss at least, use level at 1-5% of total weight.	DT3360(Huntsman)
HM3326	Matting agent for polyester/TGIC powder coatings	Achieve 30-40% gloss, dosage at 2-5%, Good anti-yellowing, especially applied in weather resistance coatings, such as aluminum alloy ceiling	/
HM3329	Matting agent for polyester/TGIC powder coatings	Wax matting agent, 30-70% of gloss, dosage at 4% at most of total weight, excellent flowing property and stable comprehensive property	DT3329-1(Huntsman)
HC15	Matting agent for polyester/TGIC powder coatings	Wax matting agent, dosage at 2%-6%, achieve gloss 11% at least, Excellent leveling property, Good anti-yellowing property and anti-impact property	/

Type	Application	Characterization	Analogues
<b>Leveling agent/Flow agent</b>			
HL988	Homopolymer type. Applied to pure epoxy, hybrid, pure polyester, polyurethane systems.	Eliminate the fish-eye and crater phenomena, Use level at 0.8-1.2% of total weight	/



<b>HL967</b>	Copolymer type. Applied to all kinds of thermoplastic and thermosetting powder coatings. It has higher activity and it could contribute to achieving better levelling effect.	It has higher activity and it could contribute to achieving better levelling effect. Eliminate the fish-eye and crater phenomena much better, reduce the coating surface tension, and increase the film gloss The recommended dosage is 0.8%~1.2%	Estron P67
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Type	Application	Characterization	Analogues
<b>Benzoin / Degassing agent</b>			
<b>Benzoin</b>	As known as phenyl a-hydroxybenzyl ketone,	Effectively eliminate pinhole, Use level at 0.3-0.8% of total weight	/
<b>Degassing agent HA500</b>	Modified compound microcrystalline wax	Effectively eliminate pinhole with anti-yellowing property, especially applied to Polyester/HAA system, use level at 0.5-1.5% of total weight	/