## KHUA Powder Coating Products Polyester Resin for Epoxy Based Formulations

Product	Curing Condition	Properties	Tg °C	Tribo Gun	Over baking	Flow (PCI)	Acid Value mgKOH/g	Viscosity @ 200 °C mPa.s		
Hybrid Ty <sub>l</sub>	Hybrid Type 50:50									
GH-1151	180°C/15min	High gloss, competitive price	50			7	72-78	3500-4500		
GH-1152	180°C/15min	General purpose resin with excellent properties	54			7	72-78	3000-4200		
GH-1153	180°C/15min	Excellent properties with good mechanical property and good flow	59			6	72-78	5500-8000		
GH-1155	180°C/10min	Suitable for hot transfer printing, fast curing	54			6	70-76	7500-10000 (175 °C)		
GH-1156	180°C/15min	Good matting effect with physical matte agent	54			6	68-75	3500-5500		
GH-1157	130°C/15min	Special for MDF	51			6	67-74	5000-8000 (175 °C)		
GH-1158	160°C/12min	Good wetting properties, excellent general properties	57			6	67-73	7500-10500 (175 °C)		
Hybrid Typ	Hybrid Type 60:40									
GH-1161	180°C/15min	Very good general properties	56			7	50-56	7500-9500 (175 °C)		
GH-1161A	180°C/15min	Very good general properties	56			7	50-56	7500-9500 (175 °C)		
GH-1162	180°C/15min	Suitable for matting powder coating, competitive price	53			7	50-56	2800-3800		
GH-1163	180°C/15min	Excellent anti-yellowing and good flow	52			7	48-54	7800-9800 (175 °C)		
GH-1165	180°C/10min	High Tg, general properties	62			6-7	42-48	3000-5000		
GH-1166	200°C/10min	High Tg, excellent flow, suitable for physical matting agent	62			7-8	56-67	2000-4000		
GH-1167	200°C/10min	High gloss, excellent flow and mechanical properties	57		Х	7-8	46-54	3500-5200		
Hybrid Type 70:30										
GH-1171	180°C/15min	Suitable for matting powder coating	55			6-7	28-35	4600-5200		
GH-1172	170°C/10min	High Tg, very good general properties	62			6-7	27-33	5500-7200		
GH-1173	180°C/10min	Medium reactivity, good flow, and gloss, suitable for matte systems with matting hardener like Vestgon B68	58			6-7	30-38	5400-6600		
GH-1175	200°C/10min	Low reactivity, excellent flow, and wetting properties, suitable for matte systems with matting hardener like Vestgon B68	58			7-8	30-36	4500-6000		

## Polyester Resin for TGIC Based Formulations

Product	Curing Condition	Ratio of PE/Hardener	Properties	Tg °C	Tribo Gun	Over baking	Flow (PCI)	Acid Value mgKOH/g	Viscosity @ 200 °C mPa.s
Standard	d Durable Po	lyester Re	sin						
GH-2201	200°C/10min	93/7	Suitable for tribo gun	63	Х		6-7	32-38	4500-5500
GH-2202	200°C/10min	93/7	Good for hot transfer printing, excellent mechanical properties	64			5-6	32-38	4000-5500
GH-2203	200°C/10min	93/7	Very good flow, excellent mechanical properties	64			7	32-38	3000-4500
GH-2204	190°C/10min	93/7	Excellent mechanical property and general properties, medium curing speed	68		Χ	6-7	30-36	4500-5500
GH-2205	200°C/10min	93/7	Excellent flow and anti-yellowing	68		Х	7-8	30-36	4500-5500
GH-2205A	200°C/10min	93/7	Excellent flow and anti-yellowing	68		Χ	7-8	30-36	4500-5500
GH-2206	200°C/10min	93/7	High Tg, suitable for tribo gun	67	Х	Х	7-8	30-36	4000-5500
GH-2207	200°C/10min	93/7	Suitable for sand finish with competitive price	63			5-6	27-32	5500-7500
GH-2208	200°C/10min	93/7	Excellent flow with good anti-yellowing, suitable for Aluminium profile	68		Х	7	28-34	4500-5500
GH-2208A	200°C/10min	93/7	Excellent flow with good anti-yellowing, suitable for Aluminium profile	68		Х	7	28-34	4500-5500
GH-2209	200°C/10min	93/7	Gas oven resistance, no blooming	64		Х	6-7	32-38	3500-4500
GH-2211	190°C/10min	93/7	Good weathering resistance, excellent flow and mechanical properties	70			6	30-38	5000-7500
GH-2212	180°C/10min	93/7	Fast curing speed, excellent mechanical properties	68		Х	5-6	30-36	4500-5500
GH-2214	180°C/10min	93/7	Thin film and special for coil panel	63		X	6-7	30-36	3500-5500
Low Hardener Demand Polyester Resin									
GH-2221	200°C/10min	94/6	Excellent flow, competitive price	63			6-7	28-33	4500-5500
GH-2222	200°C/10min	94/6	Excellent flow and properties, suitable for matting finish	63			6-7	28-33	4500-6000
GH-2223	200°C/10min	94/6	General purpose resin with excellent mechanical property, competitive price	63			6-7	27-34	5500-8000
GH-2225	200°C/10min	94/6	Excellent general propterties with good flow	63			6-7	28-32	4500-5500
GH-2226	200°C/10min	94/6	Excellent flow with good mechanical properties	62			6-7	28-32	4500-5500

Super Durable Polyester Resin									
GH-5501	200°C/10min	93/7	Excellent weathering resistance, 4-5 times better than standard durable resin	64			6	29-35	4500-6500
Matte Dry	Matte Dry Blend System Polyester Resin								
GH-4401	200°C/10min	90/10	For matte dry blend systems as fast component; 30% Gloss @ 60°	64			5	50-56	6800-8000
GH-4402	200°C/10min	96/4	For matte dry blend systems as slow component; 30% Gloss @ 60°	65			7-8	18-24	6500-8000
GH-4403	200°C/10min	90/10	For matte dry blend systems as fast component ; 30% Gloss @ 60°	68		Χ	5	48-53	3500-5200
GH-4404	200°C/10min	95/5	For matte dry blend systems as slow component; 30% Gloss @ 60°	62			7-8	20-26	6500-9000
GH-4405	200°C/10min	96/4	For matte dry blend systems as slow component; 30% Gloss @ 60°	60		Х	7-8	20-25	7500-9000

## Polyester Resin for Primid Based Formulations

Product	Curing Condition	Ratio of PE/Hardener	Properties	Tg °C	Tribo Gun	Over baking	Flow (PCI)	Acid Value mgKOH/g	Viscosity @ 200 °C mPa.s
Standard	Standard Durable Resin								
GH-3301	200°C/10min	96.5/3.5	Low hardener demand	62			6	19-24	6500-8500
GH-3320	180°C/10min	95/5	Excellent mechanical property and excellent weathering resistance	64			6	28-34	3500-5500
GH-3321	180°C/10min	95/5	Excellent mechanical propterty and good over-baking resistance	62		Χ	6-7	32-36	3200-4500
GH-3322	180°C/10min	95/5	Excellent weathering resistance, suitable for tribo gun, gas-oven resistance	61	×	X	6-7	30-35	2800-4000
GH-3323	180°C/10min	95/5	Good weathering ability and good flow	60			7	28-34	1500-3500
GH-3325	180°C/10min	95/5	Very good flow, gas-oven resistance, no pin-hole with thicker film	62		Χ	7-8	30-36	2800-4100

Definitions Definitions						
Av, mg KOH/g: Acid Value as expressed by mg KOH per g resin	Viscosity, mPa.s:  The viscosity of the resin measured at 200 °C					
<b>Tribo:</b> Resin that can be used in tribo gun without additives	<b>Tg °C:</b> Glass transition temperature of resin					



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## Company Overview

Aal Chem is a chemical distributor that offers a diverse range of product lines. We are the largest importer of epoxy resin in North America and utilize over fifteen warehouses nationwide. Our core markets include paints and coatings, graphic arts, adhesives and sealants, construction, rubber, and composites. We choose to partner with trusted suppliers to enure quality materials at competive pricing. Through our responsive customer service, logistical expertise, and technical support, we provide our customers with the best solutions for their business.