



# Ultimeg Range

Technical Guide To Selection

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## AEV Asia Sdn Bhd

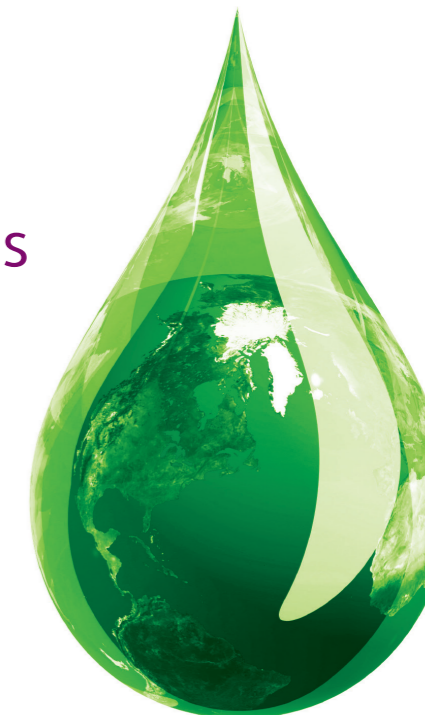
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D'25 @ Meranti Puchong  
47120 Dengkil, Sepang,  
Selangor DE,  
Malaysia









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## Electrical Insulating Epoxy Resins

VOC Free Epoxy Technology  
Non Flammable  
UL Recognised Products



		Thermal Class	S.G	Shelf life	Viscosity	Typical cure	Bond strength	Bond strength	Dielectric strength		Special property	Application	Description	
		Class according to UL1446 (temp°C)	G/cm <sup>3</sup>	Months @ 21°C	B4 cup seconds or Poise @ 25°C	hrs @	ASTM D2519 @ 21°C kg	ASTM D2519 @ 150°C kg	ASTM D115 dry kV / mm IEC243-1	After 24hrs water immersion				
100% VOC FREE, EPOXY TECHNOLOGY	Epoxy, single part, VOC free trickle resin	U2050L (UL provisional)	H (180)	1.20	9	60	5 -7 mins @ 150°C (Induction)	IEC 1033 Twisted Coil @ 23°C >700N	IEC 1033 Twisted Coil @ 155°C > 70N	>200 kV/cm	Dielectric Constant IEC250 3.9 @ 50Hz	Stable Single part, low viscosity, V.O.C free quick cure epoxy	Suitable for OEM application as an alternative to traditional Polyester two part systems	A clear Low viscosity, single component Trickle resin suitable for automated trickle application, low / non odour, high bond strength good penetration epoxy resin.
		U2050 (UL provisional)	H (180)	1.22	9	100-150	5-7 mins @ 150°C (Induction)	IEC 1033 Twisted Coil @ 23°C >700N	IEC 1033 Twisted Coil @ 155°C > 70N	>200 kV/cm	Dielectric Constant IEC250 3.9 @ 50Hz	White, rapid cure, stable single component, trickle epoxy	Power tool & Automotive armatures, quick repair on AC motors for the repair industry	A rapid cure, single part White Epoxy trickle resin with exceptional mechanical and thermal capabilities. Available in RR version in a 0.5kg, hand held flexible bottle, with trickle spout.
		U2050GC (UL provisional)	H (180)	1.39	4	Thixo	20 mins @ 150°C	Tensile strength ISO527 35N/m2	Elongation ISO527 1.2%	>168 kV/cm	Dielectric Constant IEC250 4.56 @ 50Hz	White, single part, Gel coat/ reinforcing resin, giving 250-400µm build on windings	To offer reinforcement on susceptible rotating windings	A single part, white trickle resin, particularly designed for the reinforcement of rotating windings, under elevated centrifugal force, such as the single wires on commutators, and where coil leads start and finish.
		U2020	H (180)	1.10	24	3 (Mixed)	Room temperature	25	6	110	82	High bond, room temperature cure	Stators /rotors	High bond strength, ambient cure epoxy trickle resin. Available in Link Packs as an easy dispense option.
		U2830	B (130)	1.29	12	105	2-5hrs @ 130-150°C	N/A	N/A	IEC 60243 150Kv/cm	N/A	Environmental ingress protection, with short cure time and non crack flexible coating	Surface coating for component protection	A red single component epoxy resin with low filler content. The system is designed to fully cure with short processing time (2 hours at 130°C), which will result in a semi-rigid film with the flexibility to prevent cracking under strain or bending.
	Wet wound	U2001WW	H (180)	1.48	6	Thixo	4hrs @ 150°C	N/A	N/A	100	85	Heat transfer	Wet winding of field coils/end windings	Wet winding resin that cures to give exceptional bond strength and heat transfer.
	Wound cores	U2004LN	H (180)	1.12	12	3.5-5.5	4 hrs @ 165°C	Tensile strength ISO527 18N/m2	Elongation ISO527 10%	17.5	13	Low viscosity/V.O.C free	Wound Cores	Flexible void free impregnation of cut cores and transformers.
	Water based	U2002AQ 	H (180)	1.09	12	20-30cps	4hrs @ 150°C	20	3	100	70	General Purpose Impregnation	LV motors	0 VOC UL Recognised Epoxy Emulsion for impregnation of low voltage motors.
	VPI, Dip, Specialised and standard applications	U2002L 	H (180)	1.12	12	4	4hrs @ 150°C	26	5.4	104	75	Low viscosity / V.O.C	Motors / Transformers	0 V.O.C Epoxy impregnation applied by dip / roll / VPI to all general purpose motors and transformers. UL systems are available for all the 2002 range.
		U2002T 	H (180)	1.15	12	35	4hrs @ 150°C	37	8.3	120	65	Higher film build	LV / MV / Traction / Trafo	Higher build Epoxy VPI resin, where traditional film builds of Epoxy are not acceptable.
		U2002XT 	H (180)	1.15	12	6	4hrs @ 150°C	45	8	IEC243. 50µM film. 50Hz & 20°C=115Kv/mm	IEC243. 50µM film. 50Hz & 150°C=55Kv/mm	Higher film build	LV / MV / Traction / Trafo	Higher build Epoxy VPI resin, for random wound machines rated up to 7Kv, offering film builds of 100µM. Designed for elevated chemical and mechanical protection, notably in chemical plants, offshore, marine locations and challenging environments.
		U2002HV 	H (180)	1.13	12	120 / 3.5	8hrs @ 165°C	37	8.5	TBC	TBC	High Voltage Resin	HV Machine Impregnation	Anhydride-free HV resin exhibiting very low viscosity at ambient and elevated temperatures for excellent impregnation of mica tapes for us up to 15kV.
		U2002HVR 	H (180)	1.14	12	6	8hrs @ 165°C	31	6.8	120	85	High Voltage Resin	HV Machine Impregnation	Global impregnation of HV systems where uncatylsed Mica tapes are used up to 15kV.
		U2006 	H (180)	1.15	12	30	8hrs @ 140c	32	5.4	210	115	Film build / Bond strength stability	VPI of LV Machines	A resilient single component VPI epoxy resin with excellent stability and high bond strength and electrical properties.
		U2006RD 	H (180)	1.14	12	35	8hrs @ 140c. (Available with accelerated GT)	26	5.4	50µM film. 50Hz & 20°C=115v/µM	50µM film. 50Hz & 150°C=58v/µM	Ideal for Chemical, Offshore and Marine environment.	Roll Dip/Trickle/VI of Rotating machines especially alternatriors	A solventless, fast gel, single component, slightly thixotropic resin, giving 100% filled windings, with exceptional high bond strength at operating temperatures up to class H (180°C).
U2220 		C (220)	1.15	12	50	8hrs @ 165c	38	8.6	190	115	High Temperature properties	VPI of Traction motors and field coils	A high performance VPI Epoxy resin system that exhibits superior properties at elevated temperatures.	