

V9500: Two-part Epoxy Adhesive

- A two-part high performance epoxy adhesive with an operating temperature of -75°C to 150°C

Application

- Specially modified to meet the military requirements associated with heatshrinkable components for wire and cable harnesses.

Standards

- Approved to: VG 95-343 Pt15
- Conforms to: Def. Stan 59-97 Issue 3 Type U

Two-part Epoxy Adhesive		Typical Results	Test Method
Properties			
Softening Point		N/A	
Cure Time		V9500 will cure to a tack free condition after 24 hours at 25°C . A more rapid cure can be produced at 85°C for 2 hours.	
Peel Strength for:			
	XLPE / Metal	150 N/25mm	VG 95-343 Pt 14
	XLPE / XLPE	100 N/25mm	
Lap Shear Strength for:			
	Metal / Metal	7.0 kN (23°C) 1.4 kN (150°C)	VG 95-343 Pt 15 (12.5mm x 25mm)
Water Absorption	25°C	< 0.2%	ASTM D570
Solvent Resistance			
	Saline	Excellent	Def. Stan. 59-97
	Hydraulic Fluid	Excellent	
	Lubricating Oil	Excellent	
	Aviation Fuel	Good	
	Automotive Fuel	Good	
	Diesel Fuel	Very Good	
	De-icing Fluid	Excellent	
Dynamic Shear			
	23°C	520 N	VG 95-343 Pt 14
	100°C	180 N	

W8: Hot Melt Adhesive

- A hot melt adhesive tape with an operating temperature range of -55°C to +105°C.

Application

- A high temperature hot melt adhesive that bonds well to polyethylene and metals. Compliments H material and has good resistance to water ingress.

Standards

- Def. Stan 59-97 Issue 3 Type WH -55°C to +105°C

Hot Melt Adhesive			
Properties		Typical Results	Test Method
Softening Point		110°C	ASTM E28
Cure Time		N/A	
Peel Strength for:			VG 95-343 Pt 14
	XLPE / Metal	80 N/25mm	
	XLPE / XLPE	210 N/25mm	VG 95-343 Pt 15
	PVC / PVC	80 N/25mm	
Lap Shear Strength for:			(12.5mm x 25mm)
	XLPE / Metal	180 N	
	XLPE / XLPE	250 N	
	PVC / PVC	70 N	
Water Absorption	25°C	< 0.2%	ASTM D570
Solvent Resistance		Fair under splash conditions.	
Dynamic Shear at	23°C	350 N	VG 95-343 Pt 14

W24: One-Part Epoxy Adhesive

- A one-part high performance epoxy adhesive with an operating temperature of -75°C to 200°C

Application

- Specially modified to meet the military requirements associated with heatshrinkable components for wire and cable harnesses.

Properties

- Recommended storage temperature below 40°C , can withstand excursions to 80°C

Standards

- Approved to: VG 95-343 Pt18
- Conforms to: Def. Stan 59-97 Issue 3 Type U

One-Part Epoxy Adhesive		Typical Results	Test Method
Properties			
Softening Point		N/A	
Cure Time		Is fully cured after shrinking according to the W24 code of practice.	
Peel Strength for:			
	XLPE / Metal	150 N/25mm	VG 95-343 Pt 14
	XLPE / XLPE	100 N/25mm	
Lap Shear Strength for:			
	Metal / Metal	7.0 kN (23°C) 1.0 kN (200°C)	VG 95-343 Pt 15 (12.5mm x 25mm)
Water Absorption	25°C	< 0.2%	ASTM D570
Solvent Resistance			Def. Stan. 59-97
	Saline	Excellent	
	Hydraulic Fluid	Excellent	
	Lubricating Oil	Excellent	
	Aviation Fuel	Good	
	Automotive Fuel	Excellent	
	Diesel Fuel	Very Good	
	De-icing Fluid	Excellent	
Dynamic Shear			VG 95-343 Pt 14
	23°C	800 N	
	100°C	260 N	

WM250: Hot Melt Adhesive

- A hot melt adhesive with an operating temperature range of -50°C to +80°C.

Application

- Good general-purpose adhesive, bonds to most materials and has good resistance to water ingress.

Properties

- WM250 is supplied pre-lined in heatshrink shapes or as a solution in 1 litre and 5 litre containers (Refer to application guide for use of solution)

Standards

- Def. Stan 59-97 Issue 3 Type WL -40°C to +70°C

Hot Melt Adhesive			
Properties		Typical Results	Test Method
Softening Point		95°C	ASTM E28
Cure Time		N/A	
Peel Strength for:			
	XLPE / Metal	150 N/25mm	VG 95-343 Pt 14
	XLPE / XLPE	80 N/25mm	
	XLPE / PVC	60 N/25mm	
Lap Shear Strength for:			
	XLPE / Metal	200 N	VG 95-343 Pt 15 (12.5mm x 25mm)
	XLPE / XLPE	225 N	
	PVC / PVC	70 N	
Water Absorption	25°C	< 0.2%	ASTM D570
Solvent Resistance		Fair under splash conditions.	
Dynamic Shear	23°C	365 N	VG 95-343 Pt 14