

Technical data sheet

VE-S

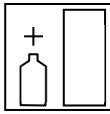
Vinyl ester adhesive with increased strength



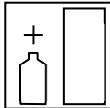

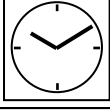
Application:

- Composite manufacturing industry
- manufacture of waterborne vessels (boats: motorboats and sailing yachts)
 - wind turbines
 - transport (fairings, car bodies, etc.)
 - other products made of composite (laminated) materials

Properties:

- excellent adhesive properties
- can be applied in thick layers
- no sagging
- strong and durable joints
- hardened with methyl ethyl ketone peroxide or cumyl peroxide

CHARACTERISTICS	VE-S	STANDARD
Density	1.05 – 1.15 g/cm ³	PN-EN ISO 2811-1
Gel time at 20°C	60 - 70 min	--
Shrinkage	< 2 %	PN EN ISO 3521
Tensile strength	> 40 MPa	PN EN ISO 527
Elongation at break	> 1.5 %	PN EN ISO 527
Flexural strength	> 70 MPa	PN EN ISO 178
Flexural strain	> 3 %	PN EN ISO 178
Glass transition temperature	90 °C	DIN EN ISO 6721
HDT	65 °C	PN EN ISO 75-1
Polish Register of Shipping Type Approval Certificate	TT/1334/710250/22	
DNV class programme DNV-CP-0086 Type Approval	TAK000025D	
CAUTION: Tests were made with 2% Metox 50 hardener.		
SUBSTRATES		
polyester, vinyl ester and epoxy laminates	degrease with the PLUS 780 a remover, dry sand P80 – P120, and degrease again.	
plywood, wood	dry sand with P80 – P120 and remove dust,	
aluminium	dry sand with P80 – P100 and remove dust and degrease with the PLUS 780	
CAUTION		
The adhesive should not be applied directly on wash primers, one-component acrylic or nitrocellulose products		
MIXING RATIO		
	ADHESIVE HARDENER	Ratio by weight
		100g 1.5-2.5g
COATABILITY		
Polyester, vinyl ester or epoxy laminates (resins), polyester putties and acrylic primers		
APPLICATION CONDITIONS		
The minimum application temperature is +10°C at air humidity from 30 to 70%.		

APPLICATION	
	Clean and sand the surface
	Degrease the surface with PLUS 780
	Observe the required amount of hardener. Mix the components thoroughly until a uniform colour is obtained. Weight quantity of components: Add 100 g of VE-S to 1.5-2.5 g of hardener. Gel time at 20°C: 60-70 min
	Apply with a trowel (maximum layer thickness: 10mm).
	The curing time is 3 to 5 h at 20°C with 2% of hardener.
Supplementary products:	
Hardener – methyl ethyl ketone peroxide (e.g. METOX 50).	
EQUIPMENT CLEANING	
THIN 850 acrylic thinner or NC solvent.	
PACKAGING	
15 kg	
STORAGE CONDITIONS	
Store in a cool dry room, away from sources of fire and heat. Avoid direct exposure to sunlight.	
SHELF LIFE	
VE-S	6 months / 20°C
SAFETY	
See the Safety Data Sheet.	
NOTES	
Intended for professional use only.	
OTHER INFORMATION	
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