



EAGLE CHEMICALSTM
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D3-class
adhesive for
wood

H-EAGLE (120/50) 50%

H-EAGLE (120/50) 50% is a vinyl acetate homopolymer dispersion of medium viscosity with reactive groups and an acidic pH value which confers better water resistance and adhesion power on various wooden substrates and paper

APPLICATIONS

D3 class adhesive for various wooden substrates and paper

CHARACTERISTICS

- Excellent water resistance with accordance to DIN EN 204 D3.
- Excellent bond strength on hard, compact and exotic wood substrates.
- Quick setting time.

PROPERTIES

Technology	Core-shell polyvinylacetate homopolymer
Product Type	D3-class adhesive
Base	Dispersion polymer; APEO free, low formaldehyde content
Condition	Water-based dispersion
Components	Class D3: One-component Class D4: Two-components
Appearance	Milky white

Adhesives types using H-EAGLE (120/50)50%

H-EAGLE(120/50)50% is a one-component adhesive for wood and wood substitutes where class D3 water resistance bonds according to EN 204 are required.

D3-ADHESIVE

Materials	Weight (gm)
H-EAGLE(120/50)50%	969.8
Diglycol acetate, BGA	20.6
Urea	9.6
Total	1000

D4-ADHESIVE

Materials	One- component D4 Weight	Two-components D4 Weight
H-EAGLE(120/50)50%	938.8	958.4
Propylene carbonate	19.8	0
Diglycol acetate, BGA	20.6	20.6
Urea	9.6	9.6
Glutaraldehyde	5.9	5.9
Sodium metabisulfite	5.3	0
Desmodur® DN	0	5.5
Total	1000	1000

TECHNICAL DATA

1- Supply Specifications

Test	Unit	Value	Deviation	Method
Solids content	%	50	±1.0	DIN 53 189/ISO 1625
Viscosity	mPa.s	12000	±3000	ISO 2555; 23 °C) Brookfield RVT, sp 6, rpm 20 min-1
Density	g/cm ³	1.08	±0.02	ISO 8962
pH		3.2	±0.4	DIN 53 785 / ISO 1148

2- Typical Dispersion Values

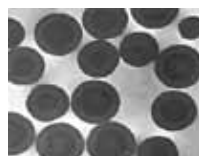
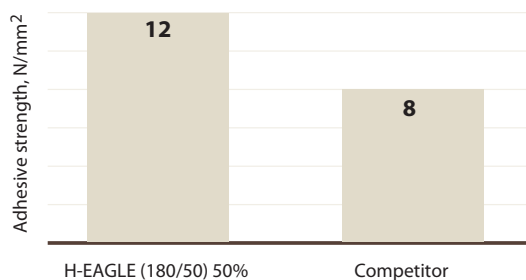
Test	Unit	Value
Minimum film forming temperature	°C	Approx. 4
Particle size	µm	0.3 – 3.0
Film appearance		Slightly opaque, tack-free film

3- Physico-mechanical Values

Test	H-EAGLE(120/50) 50%	Competitor
Water resistance(1)	++	+
Thermal stability(2)	OK	Slightly yellowish
Adhesive strength, N/mm ²	12	8

(1) ++ very good & + good water resistance with accordance with EN 204.

(2) Thermal stability test was carried out at 65°C for 3 days.



Transmission electron microscope, TEM, shows the core-shell morphology of our polymer latex



Less water absorption with fine particle size polymer than the competitor.