



DXV.4091

Water-resistant and water-vapour permeable

DXV.4091 provides the perfect combination of water-resistance and water-vapour permeability. The resin is suited for low-emission coatings for interior and exterior applications. DXV.4091 is a co-polymer made of natrium sodium silicate and Acrylate/VeoVa. The neutral pH offers a good compatibility with different additives and most pigments. Additionally, the adhesion on gypsum is excellent.

Unique properties

- Very high water-resistance
- Good water-vapour permeability
- Excellent adhesion on gypsum
- Suitable for lime systems
- Silicone-compatible
- Compatibility with pigment paste and due to this a good variety of colours are possible
- Suitable for interior and exterior applications

Environment-friendly

- Suitable for low biocide systems
- Can be formulated without solvent
- Contains neither VOC nor APEO
- Not EUH 208 labelled

Typical applications

- Wherever a good water-vapour permeability is needed
- Primer on gypsum

Technical properties

Resin base	Silicate-Acrylate / VeoVa
Solids content	49-51 %
Density	approx. 1 g/ml at 20 °C
Stabilizer system	anionic
Viscosity	400–600 mPa·s at 20 °C
pH-value	7.0–8.0
Particle size	100 nm
MFFT	10 °C
Frost resistance	no
Water absorption	<4 %
Tensile strength at break	5 N/mm ²
Elongation at break	500 %

Exterior paint based on DXV.4091
Starting formulation 4091-AF01-01

	Raw materials	Quantity	Function	Supplier
1	Water	281.0		
2	Acticide MV	1.0	Pot bacteriacide	Thor GmbH
3	Disperbyk-181	4.0	Wetting and dispersing agent	BYK-Chemie GmbH
4	Walocel XM 20000 PV	0.5	Thickener	Dow Chemical Company
5	Ammonia 25%	0.5	Base	Diverse
6	Kronos 2190	180.0	Pigment	Kronos International Inc.
7	Agitan 700	2.0	Defoamer	Münzing Chemie GmbH
8	Butylglycol	7.0	Film forming agents	BASF SE
9	Finntalc Mo5SL	50.0	Filler	Mondo Minerals
10	Omyacarb 2-AV	50.0	Filler	Omya
11	Omyacarb 5-AV	100.0	Filler	Omya
12	Tafigel PUR 41	4.0	Thickener	Münzing Chemie GmbH
13	DXV.4091	320.0	Resin	VANORA AG
		1000.0		

Mixture instruction

- Pos. 1 Submit water
 Pos. 2-4 Add during agitation, let swelling for 10 minutes
 Pos. 5-6 Add during agitation, dispersing for minimum 15 minutes (Temp. max. 50 °C)
 Pos. 7-12 Add during agitation, stir for 5 minutes
 Pos. 13 Add during agitation, stir for 5 minutes at low speed

Technical data

Viscosity Brookfield at approx. 20 °C (Spindle 6, 100UpM)	6150 mPa.s
Pigment volume concentration (PVC)	47 %
pH	8.2

Water vapour diffusion value

Sd-value [m]	0.3
Water vapour-value μ	23