



## WS.45.D

*Optimum improvement for lime-based systems*

Through the unique chemistry of WS.45.D, extraordinary properties in all lime-based systems can be achieved. WS.45.D reaches a clear improvement of hydrophobicity in lime-based and cement systems.

### Unique properties

- Prevents the dissolving of calcium ions from the façade, thereby eliminating efflorescence
- Hydrophobic
- Water resistance is significantly improved
- Suitable for interior and exterior applications

### Environment-friendly

- Can be formulated without solvent
- Contains neither VOC nor APEO
- Not EUH 208 labelled

### Typical applications

- Lime paints and plasters
- Coating and hydrophobizing of hydraulically setting systems, primer coat, primer, barrier coating and plasters
- Stucco and moulding materials

### Technical properties

Resin base	VAc / VeoVa
Solids content	41–43 %
Density	approx. 1 g/ml at 20 °C
Stabilizer system	Polyvinylalcohol
Viscosity	7000–13000 mPa·s at 20 °C
pH-value	2.5–4.0
Particle size	2500 nm
MFFT	2 °C
Frost resistance	no
Water absorption	approx. 25 %
Tensile strength at break	4 N/mm <sup>2</sup>
Elongation at break	450 %
Glass transition temp. (T <sub>g</sub> )	-1 °C

*Lime paint based on WS.45.D*  
*Starting formulation 45-KF01-01*

	<b>Raw materials</b>	<b>Quantity</b>	<b>Function</b>	<b>Supplier</b>
1	Water	172.0		
2	Natrosol Plus 330 PA	2.0	Thickener	Ashland Inc
3	AMP-95	1.0	Base	Dow Chemical Company
4	Amylotex 8100	1.0	Thickener	Ashland Inc
5	Orotan 850 ER LO	3.0	Wetting and dispersing agent	Dow Chemical Company
6	Kronos 2190	20.0	Pigment	Kronos International Inc.
7	Slaked lime (slurry)	300.0	Pigment	Diverse
<b>8</b>	<b>WS.45.D</b>	<b>50.0</b>	<b>Resin</b>	<b>VANORA AG</b>
9	Omyacarb 40-GU	450.0	Filler	Omya
10	Agitan 700	1.0	Defoamer	Münzing Chemie GmbH
		1000.0		

**Mixture instruction**

- Pos. 1     Submit water  
 Pos. 2-6     Dispersing for minimum 10 minutes (Temp. max. 50 °C)  
 Pos. 7-10     Add during agitation, stir for 5 minutes at low speed

**Technical data**

pH

11.3