



BXA.4281

Bio based – sustainable

BXA.4281 is Vanora's latest development of an aqueous polymer dispersion based on 67% renewable raw materials. It is a sustainable solution that allows paints and plasters to be formulated with a reduced carbon footprint, without any loss in performance compared to traditional systems. Formulations based on BXA.4281 are highly water and weather resistant. The new resin also has outstanding and unique properties in combination with standard, silicate, silicone resin and lime-based systems.

Unique properties

- Good hydrophobicity
- High water-resistance
- Good resistance to yellowing
- Suitable for interior and exterior applications
- Can be formulate with our additive WP.20 to get early rain resistance

Environment-friendly

- 67% carbon from renewable sources, from a pine by-product and castor seeds (detected by 14C method ASTM 6866-21, analysis report available on request)
- Can be formulated without solvent
- Contains neither VOC nor APEO
- Not EUH 208 labelled

Typical applications

- Paints and plasters, coatings and additives
- Standard, silicate, silicone resin and lime-based systems
- Mortar additive, priming and adhesion coats with maximum requirements profile
- Roof coatings

Technical properties

Polymer base	Acrylic/ Methacrylic
Org. portion/ ¹⁴ C- Method	67 %
Solids content	44 - 46 %
Density	approx. 1 g/ml at 20 °C
Stabilizer system	anionic
Viscosity	30-300 mPa·s at 20 °C
pH-value	2.5-4.0
Particle size	200 nm
MFFT	0 °C
Frost resistance	no
Tear strength	approx. 2 N/ mm ²
Elongation at break	approx. 800 %
Glass transition temp. (Tg)	11 °C

Indoorpaint based on BXA.4281
Starting formulation 4281-IF01

	Raw materials	Quantity	Function	Supplier
1	Water	279		
2	Vinkocide	1.0	Pot bacteriacide	Thor GmbH
3	Disperbyk-181	2.0	Wetting and dispersing agent	BYK-Chemie GmbH
4	Walocel XM 20000 PV	1.0	Thickener	Dow Chemical Company
5	Ammonia 25%	1.0	Base	Diverse
6	Kronos 2190	150.0	Pigment	Kronos International Inc.
7	Agitan 700	2.0	Defoamer	Münzing Chemie GmbH
8	Talk GS 10	30.0	Filler	Mondo Minerals
9	Omyacarb 2-AV	130.0	Filler	Omya
10	Omyacarb 5-AV	220.0	Filler	Omya
11	Tafigel PUR 41	2.0	Thickener	Münzing Chemie GmbH
12	BXA.4281	180.0	Polymer	VANORA AG
		1000.0		

Mixture instruction

- Pos. 1 Submit water
- Pos. 2-5 Add during agitation, let swelling for 10 minutes
- Pos. 6-7 Add during agitation, disperse for at least 15 min (temp. max. 50°C)
- Pos. 8-11 Add during agitation, stir for 5 minutes
- Pos. 12 Add during agitation, stir for 5 minutes at low speed