

CRILAT 4830



CRILAT 4830 is a water based acrylic dispersion developed with core-shell technology, self-crosslinkable at room temperature suitable to formulate water based enamels for different substrates: wall, wood, metal, for interior/exterior uses for architectural coating. CRILAT 4830 is free from alkylphenol-ethoxylates (APEO-FREE), formaldehyde, plasticizers and coalescing agents.



PACKAGING

CRILAT 4830 is available in bulk quantities, 1000 L IBC and 125 Kg PE drums.

STORAGE

CRILAT 4830 remains stable for at least 6 months, when stored at temperatures between $+5^{\circ}\text{C} \div +40^{\circ}\text{C}$.

The main characteristics of CRILAT 4830 are:

- a) high blocking resistance
- b) high gloss
- c) excellent chemical and mechanical resistance
- d) good wet and dry adhesion, also on old alkyd paints
- e) good colour development
- f) good rheological behaviour

APPLICATIONS

CRILAT 4830 is particularly suitable for water based enamels with high gloss or satin features. CRILAT 4830 is used for formulating exterior wood varnishes, clear and pigmented as impregnating, stains and top coats.

CRILAT 4830 allows the preparation of formulates in accordance to the Directive 2004/42/CE as CRILAT 4830 contains very low VOC content.

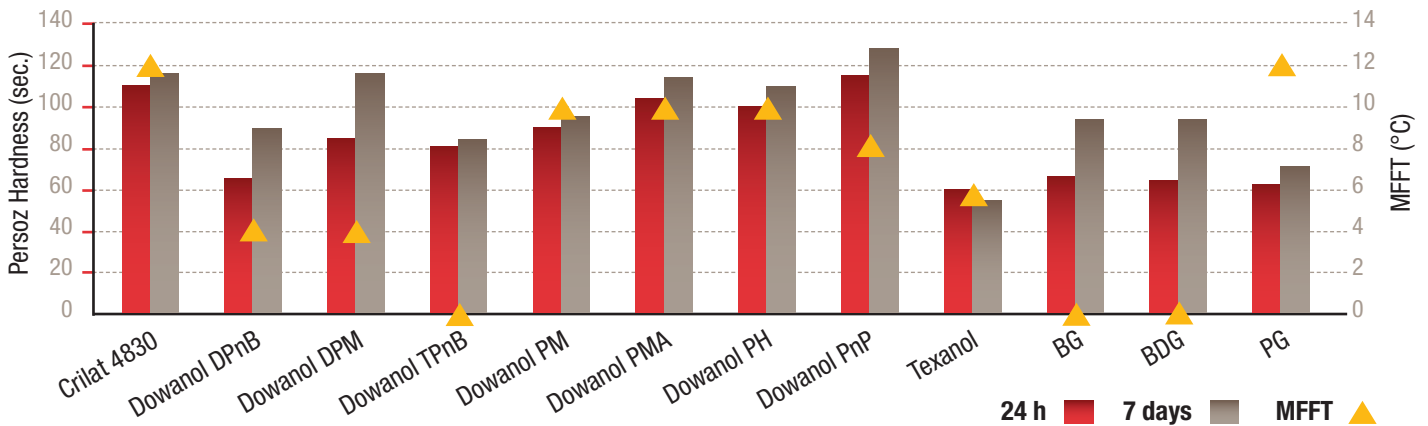
	UNIT	VALUE	METHOD
1. SUPPLY SPECIFICATIONS			
Solid content	%	46±1	MVPF 01
Brookfield Viscosity (1)	mPa·s	<1'000	UNI EN ISO 2555
pH		9.0±0.5	ISO 976

	UNIT	VALUE	METHOD
2. TYPICAL VALUES			
Minimum film-forming temperature	°C	10	UNI 8490-14
Particle size distribution	µm	0.06÷0.12	MVANS 20
Density at 23°C	Kg/dm ³	1.06	MVPF 18
Glass transition temperature	°C	26	MVANS 01

(1) RVT 20 rpm spindle 1, 23°C

**CRILAT 4830 CAN BE USED WITH DIFFERENT TYPES OF COALESCING AGENTS (1)
CRILAT 4830 IS NOT COMPATIBLE WITH DOWANOL PnB AND DOWANOL PPH**

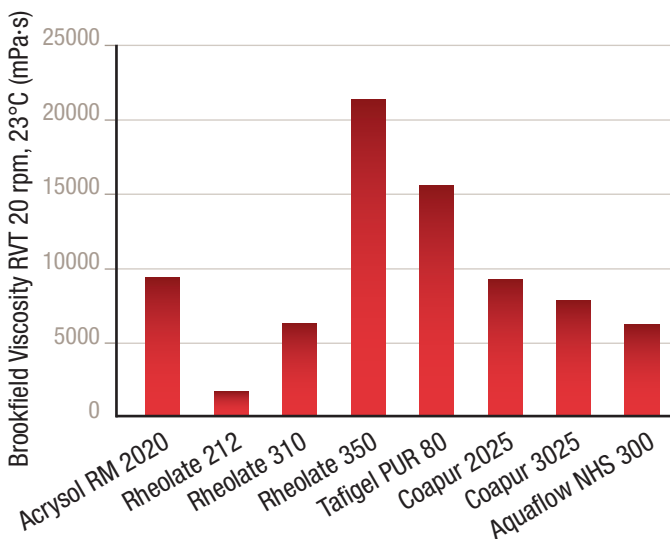
THE INFLUENCE OF COALESCENTS ON CRILAT 4830 EFFECTS ON FILM



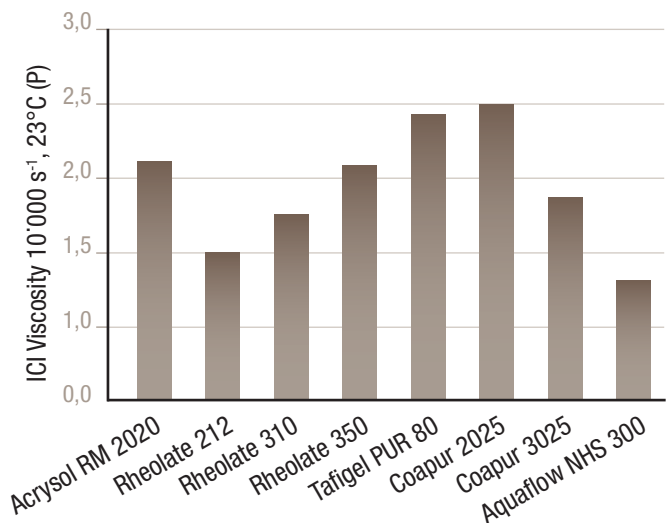
(1) The percentage of coalescing agent added is 1.20% on the dispersion

CRILAT 4830 HAS AN EXCELLENT COMPATIBILITY WITH ASSOCIATIVE THICKENERS (2)

INTERACTION WITH ASSOCIATIVE THICKENERS



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(2) The test was made adding 0.30% on the active substance of the thickener on the dispersion

WATER BASED ENAMEL WITH HIGH HIDING POWER

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COMPONENTS	w. %	FUNCTION	SUPPLIERS
Water	4.40		
Propylene glycol	3.00	Co-Solvent	Various
Tego Airex 902 W	0.30	Disareant	Evonik
AMP 95	0.20	Neutralizing agent	Angus
EFKA 4560	3.00	Dispersant	Ciba
Nalzin FA 179	0.60	Corrosion inhibitor	Elementis
Texanol	2.00	Coalescent	Eastman
Crilat 4830	20.00	Binder	Vinavil
ME 93235.E	1.20	Wax	Michelman
TiO ₂ type R706	24.20	Pigment	Dupont
Crilat 4830	40.00	Binder	Vinavil
Tafigel PUR 80	0.80	Thickener	Munzing Chemie
Tego Foamex 1488	0.30	Defoamer	Evonik
Acticide MBS	0.20	Biocide	Thor
Total	100.00		

CHARACTERISTICS	VALUE	METHOD
Brookfield Viscosity RVT 20 rpm (mPa·s)	4.500	UNI EN ISO 2555
pH	8.92	ISO 976
ICI Viscosity 10'000 s ⁻¹ (Poise)	1.64	ASTM D 4287
Gloss at 20° after 24 h	54.5	UNI 9389
Gloss at 60° after 24 h	78.7	UNI 9389

CLEAR TOP COAT

COMPONENTS	w. %	FUNCTION	SUPPLIERS
Crilat 4830	85.00	Binder	Vinavil
Tego Foamex 1488	0.40	Defoamer	Evonik
Acticide MBS	0.10	Biocide	Thor
Water	3.00		
Propylene glycol	2.30	Co-Solvent	Various
Dowanol PM	1.50	Coalescent	Dow
Texanol	2.60	Coalescent	Eastman
Coadis BR3	0.70	Dispersant	Coatex
Nalzin FA 179	0.30	Corrosion inhibitor	Elementis
Coapur 2025	1.00	Thickener	Coatex
Tego Foamex 825	0.40	Defoamer	Evonik
Water	2.30		
Byk 346	0.40	Wetting agent	Byk Chemie
Total	100.00		

CHARACTERISTICS	VALUE	METHOD
pH	9.00	ISO 976
Density at 23°C (g/ml)	1.03	MVPF 18
Gloss at 60° after 24h of drying	85.0	UNI 9389

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