Product information

ANQUAMINE® 419

Curing Agent

DESCRIPTION

Anquamine 419 waterborne curing agent is a modified aliphatic amine supplied at 60% solids in water (15%) and methoxy propanol (25%). It is intended for use with waterborne solid epoxy resin dispersions in two-component, ambient-cure, waterborne epoxy coatings. Anquamine 419 delivers excellent properties in anticorrosive primers, white gloss enamels and clear coats with solid epoxy resin dispersions. Anquamine 419 can be used with different epoxy dispersions depending on the desired end-use properties.

TYPICAL PROPERTIES

Property	Value	Unit	Method
Appearance	Amber liquid		
Colour	max 9	Gardner	ASTM D 1544-80
Viscosity @ 25°C	8,000-12,000	mPa.s	Brookfield RVTD, Spindle 4
Specific Gravity @ 25°C	1.08	g/ml	
Equivalent Wt/{H}	284		(as supplied)
Non-Volatiles	59-63	%	
Recommended use Level			
Solid Epoxy Resin (EEW 530)	20-32	PHR	0-60% excess epoxy resin
Solid Epoxy Resin (EEW 630)	14-28	PHR	0-90% excess epoxy resin

ADVANTAGES

- Excellent corrosion resistance
- Rapid dry time
- Excellent adhesion to steel
- Good colour and gloss
- Good stain resistance
- Low odour
- Low free amine content

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APPLICATIONS

• Industrial maintenance and marine primers and topcoats
• General metal primers
• Transportation primers

SHELF LIFE

At least 24 months from the date of manufacture in the original sealed container at ambient temperature.

STORAGE AND HANDLING

Refer to the Safety Data Sheet for Anquamine 419 curing Agent.

TYPICAL PERFORMANCE PROPERTIES

Typical cure schedule: 7-14 days

Anquamine® 419 was formulated for an Anti Corrosive Primer

PREPARING STEPS

A-Component: Premix the pigments (5-10) and add them to 1-4 under high shear for 15-30 minutes until Hegman gauge 6+ is achieved. Then add 10 and 12 and stir homogenous.

B-Component: Weight 1-3 and mix homogenous under shear for few minutes.

A+B: Mix 5,4 parts of Component A to 1 part of Component B (by weight). After mixing Part A and B, apply a 15-30 minutes induction time prior to application. For high-gloss finishes, no induction time is needed. However, for maximum humidity and corrosion resistance, allow the mixed paint to induct for 15-30 minutes. In gloss enamels, end of pot life is signaled by a visible loss of gloss in the dried film

RECIPE

Nb.	A-Component	Parts [g]	Parts [%]	Type	Supplier
1.	Water	56,0	10,9	Water	
2.	Disperbyk 190	6,1	1,2	Additive	BYK
3.	Surfynol DF75	1,9	0,3	Additive	Evonik
4.	Surfynol 420	2,3	0,4	Additive	Evonik
5.	Bayferrox 130M	32,8	6,4	Pigment	Lanxess
6.	Zeeospheres G400	28,5	5,5	Pigment	Zeeospheres
7.	Sparwite Barytes	28,5	5,5	Pigment	CNESST
8.	Wollastocoat 10ES	28,5	5,5	Pigment	NYCO
9.	Halox SW111	43,8	8,5	Pigment	ICL
10.	Mica White 325	4,4	0,9	Pigment	H.W. Sand Corp.
11.	Ancarez AR555	188,3	36,5	Epoxy Dispersion	Evonik
12.	Rheolate 310 (15% in water)	14,6	2,8	Additive	Elementis
	Total A	**434,9**	**84,4**		
Nb.	**B-Component**	**Parts [g]**	**Parts [%]**	**Type**	**Supplier**
1.	Anquamine 419	51,5	10,0	Curing Agent	Evonik
2.	Dowanol PM	14,9	2,9	Solvent	DOW
3.	Water	14,1	2,7	Water	
	Total B	**80,5**	**15,6**		
	Total A and B	**515,4**	**100**		

TYPICAL PROPERTIES

Property	Value	Unit	
Vol. Solids (A+B)	47	%	
Wt. Solids (A+B)	61	%	
PVC	30	%	
VOC	137	g/l	
Mix ratio by Weight (A:B)	5,4:1		
Mix Viscosity	65	KU	
Stoich	80	%	

TYPICAL HANDLING PROPERTIES

Pot-life: > 6 h

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