

Alpamine™ N41 is a neutralizing amine with outstanding dispersing properties. Waterborne coatings require pH adjustment with bases. Today, we ask these bases to do more. New latexes, high pigments and fillers loading or high binder content are some examples of systems where neutralizing is not enough. Formulations now require an agent that can also provide good co-dispersion.

Alpamine™ N41... brings more benefits:

- **Excellent pigment dispersion:** Alpamine™ N41 ability to disperse pigments allows very high pigment loading for demanding colors or to decrease pigment and dispersing agent amount for the same color effect, leading to cost savings.
- **Excellent fillers dispersion:** Alpamine™ N41 fillers dispersing efficiency can help formulators to introduce more fillers to save money or to improve the grinding step moving from a gelly paste to a viscous fluid.
- **Low odor:** Alpamine™ N41 low vapor pressure leads to low odor paints.
- **Very good paint stability:** Alpamine™ N41 high boiling point means less evaporation and therefore long lasting neutralization of the latex. As a consequence, the paints exhibit an excellent stability in term of pH and viscosity.
- **Substrates wetting:** Alpamine™ N41 low superficial tension makes it a good wetting agent in formulation. That helps the penetration of the coating in the substrate to improve its adhesion.

Alpamine™ N41's physical properties

It exhibits outstanding properties as compared to existing technologies such as 2-Amino-2-Methyl-1-Propanol (AMP).

	pKa	Superficial tension at 1000 g/l (Dynes/cm)	Boiling point (°C)	Vapor pressure at 20°C (hPa)
AMP	9.8-10.2	33	165	1.33
ALPAMINE™ N41	9.9	27	186	0.4

- Alpamine™ N41 has the same pKa as AMP, so the same neutralizing power.
- Alpamine™ N41 has a very low superficial tension leading to better co-dispersion in waterborne coatings and to a better substrate wetting.
- Alpamine™ N41 has a low vapor pressure: this means lower odor, lower volatility and thus long-lasting neutralization.

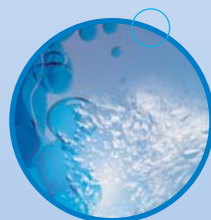
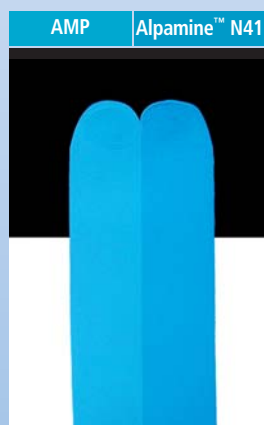
With Alpamine™ N41, it is easy to formulate paints!

The following examples of semi gloss and flat paints have been formulated with Alpamine™ N41 and AMP.

- Alpamine™ N41 leads to superior paint stability (stable pH and viscosity after several weeks).
- Alpamine™ N41 increases the tinting strength of the paints.

Semi Gloss Paint		
Water	Water	96
Anti foam	Tego Foamex 7447	2.4
Dispersing agent	Coatex P90	3
Neutralizing Amine	AMP 90 or Alpamine™ N41	3
Filler TiO ₂	TiO ₂ RHD2	300
Filler CaCO ₃	Mikhart 2	84
Binder latex	Craymul 2421	532
Coalescing agent	Texanol	18
Thickener	Coapur 3025	8.7
Water	Water	22.2
Total		1069.3

Flat Paint		
Water	Water	111
Anti foam	Tego Foamex 7447	2
Dispersing agent	Coatex P90	2
Neutralizing Amine	AMP 90 or Alpamine™ N41	2
Filler TiO ₂	Tiona 595	90
Filler	Talc 20MO	60
Filler CaCO ₃	Mikhart 2	160
Filler CaCO ₃	Mikhart 5	250
Binder latex	Craymul 2432	100
Coalescing agent	Texanol	5
Thickener	Natrosol 330 PA 2%	170
Total		952



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