

THIXOL™ 53 L

Acrylic Thickener
anti-settling & anti-sagging agent



THIXOL™ 53 L is a liquid acrylic associated thickener providing a strong pseudoplastic rheological profile to water based systems. This product significantly prevents settling and sagging without affecting levelling properties.

THIXOL™ 53 L is solvent-, APEO- and tin free.

• TYPICAL ANALYSIS

Nature: Aqueous dispersion of an acrylic copolymer

Appearance (20°C): Milky white liquid

Solids content (%): 30

pH (20°C): 3

Specific gravity (20°C): 1.06

• APPLICATIONS

THIXOL™ 53 L is a pure associated acrylic thickener, dispersed in water.

It thickens in a medium with a pH preferably adjusted between 8 and 9, and passes from its natural acid delivery form to its neutralized and water soluble form.

THIXOL™ 53 L addition level is between 0.1% and 1% of dry product on total formulation, which in most cases is below 0.5%.

THIXOL™ 53 L is an associated thickener. It develops its thickening efficiency through hydrophobic interactions which will influence viscosity at very low shear rate and thus will prevent settling and sagging.

The relatively low speed viscosity recovering of THIXOL™ 53 L after coating provides a real thixotropic effect and improves the compromise between levelling and sagging: a better levelling will be reached without sagging.

In order to obtain this effect, one should use the minimum quantity of THIXOL™ 53 L to hinder sagging and give a good coating.

THIXOL™ 53 L can usefully be combined with purely associative thickeners such as COAPUR™ 3025, COAPUR™ 5035, BR 100 P / BR 125 P, RHEOTECH™ 2000 / RHEOTECH™ 2100 modifying high shear rate viscosity and consequently reducing spattering, improving levelling and film build, especially in flat and semi-gloss paints.

THIXOL™ 53 L can be used alone in very thick formulations.

There are no known compatibility problems with universal pigment pastes.

On the contrary, the use of THIXOL™ 53 L provides positive effects in reducing pigment flotation.

THIXOL™ 53 L is a liquid product which is easy to use. It can be incorporated at each step of paint manufacture and especially at the final step. THIXOL™ 53 L is solvent free and can therefore be used in V.O.C. free formulations.

• STORAGE

THIXOL™ 53 L can be irreversibly altered by frost. It should be protected from the effects of weathering and stored between 5 and 40°C and protected from direct sun exposure. This product can be irreversibly altered by frost.

Once opened, packaging should be resealed immediately after use.

In these conditions, products should be used within 6 months after delivery.

Film-forming product. Surface may dry in contact with air.

A slight sedimentation can be visible at the bottom of drums or totes. This phenomenon is normal and has no impact on the use and level of performance as long as the solids content of the product meets the specification. If necessary, filter the product prior to its use.

- **STANDARD PACKAGING**

- 220 l plastic drums,
- 1 000 l containers,
- Bulk.

- **HEALTH & ENVIRONMENTAL DATA**

Please refer to the Material Safety Data Sheet.

• **EXAMPLES**

TRANSLUCENT FINISHING GEL WOODSTAIN **BASF polymer dispersion / Acronal 18 D**

A 130		WEIGHT	VOLUME	CHARACTERISTICS
	Water	380.0	392.3	
• COGNIS	Nopco 8034	1.0	1.1	Solids content in weight (%) = 26.7 Solids content in volume (%) = 25.3
• CROSFIELD	Gasil HP34	4.7	2.4	
• TROY	Mergal S96	28.5	28.0	Densité = 1.03
• BASF	Luconyl rouge 2817	0.5	0.3	pH = 9.0
• BASF	Luconyl jaune 1916	20.1	13.0	
• BASF	Luconyl noir 0060	0.1	0.1	
• BASF	Acronal 18D (50%)	506.1	501.7	ICI viscosity after 24 h = 1.1
	Butylglycol	20.9	22.6	
	Water	20.4	20.6	
	NH4OH (28%)	3.6	4.1	Brookfield viscosities (mPa.s) =
• COATEX	THIXOL™ 53 L	13.1	12.7	After 24 h = 10 rpm = 9 000
• COGNIS	Nopco 8034	1.0	1.1	100 rpm = 1 500
TOTAL		1 000.0 g	1 000.0 ml	

RENDERING FOR SPRAY APPLICATION **Celanese dispersion / Mowilith DM 60**

R 208		WEIGHT	VOLUME	CHARACTERISTICS
	Water	219.9	408.9	PVC (%) = 93.7
	Sodium hydroxide (20%)	4.7	7.2	Solids content in weight (%) = 74.7
	Sodium benzoate	1.7	3.0	Solids content in volume (%) = 53.4
• COATEX	THIXOL™ 53 L	21.0	36.8	Specific gravity = 1.86
	Bentonite	7.5	5.2	pH = 9.0
• COATEX	ECODIS™ P 50	1.0	1.6	
• TROY	Mergal K6N	1.0	1.8	Brookfield viscosities (mPa.s) =
• BYK CHEMIE	Byk 033	2.0	4.3	After 24 h = 10 rpm = 300 000
• MILLENNIUM	TiONA RL 68	6.5	3.0	= 100 rpm = 40 000
• CELANESE	Mowilith DM 60	20.0	36.0	
	Beatite 40	714.7	492.2	
TOTAL		1 000.0 g	1 000.0 ml	

Website: www.coatex.com

The information contained in this technical documentation relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. The information provided herein is based on technical data that Coatex believes to be reliable, provided that Coatex makes no representation or warranty as to the completeness or accuracy thereof and Coatex assumes no liability resulting from its use for any claims, losses, or damages of any third party. Recipients receiving this information must exercise their own judgement as to the appropriateness of its use and it is the user's responsibility to assess the material's suitability (including safety) for a particular purpose prior to such use. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used (2010/06/28).