Water-borne rheology expertise

Rheology is not just thickening!!! We can help you to improve various aspect:

- Storage stability improvement
- Pumpability
- In-can appearance
- Ease of application by brush, spray, roller, curtain, dipping...
- Workability
- Structure
- Open time
- Levelling
- Sagging
- Sustainability

For all these issues, Lamberti offers his expertise through a comprehensive Rheological additive toolbox for liquid waterborne formulations like Paints, Putties, Plasters, Industrial Coatings, Adhesives, Inks & Sealants.

We produce an extensive range of rheological additives

- From powder to liquid form
- Ionic and non-ionic grades
- Direct or Inverse emulsions
- From the versatile non-associative products, to the most efficient associative grades
- From highly pseudoplastic to pure Newtonian additives
- Sustainable solutions obtained from either natural or synthetic raw materials

Thanks to our wide portfolio of rheological modifiers VISCOLAM® (ASE/HASE/HSD acrylics), VISCOLAM® PS (HEUR associative polyurethanes), ESACOL® (HPG guar derivatives) and CARBOCEL® (CMC CarboxyMethyl Celluloses), Lamberti will help you providing the optimum balance of performance, sustainability and cost

Waterborne Rheological modifiers
for Coatings / Adhesives / Paints / Inks / liquid Plasters & Putties

		Physico-chemical properties				Application fields							Rheology			Sustainability
		Chemical nature	Associative	Form or Solvent type	Dry content (%)	Pigmented	Clear	Adhesives & Sealants	Protective coatings	Gloss retention	Brush / Roller / Curtain	Spray	Brookfield influence (low shear)	KU influence (mid shear) Film build	ICI influence (high shear) or Spatter resistance	Bio-based
CARBOCEL®	Low/Mid-shear CMC Technical & Purified grades (Brookfield & KU builders) and film-formers for thickening and special effects	CMC		Powder	N/A	X		X	○○○○○	●●○○○	●●○○○	●●○○○	●●●●○	●●●○○	○○○○○	
ESACOL® HV 225	Pure Guar Gum 200 mesh high viscosity	Guar		Powder	N/A	X		X	●○○○○	●●○○○	●●○○○	●●○○○	●●●○○	●●○○○	●○○○○	
ESACOL® ED 1	Low viscosity HPG - Easily dispersible - provides workability and creaminess in paints while offering high storage stability, anti-sagging, and anti-spattering performance	HPG		Powder	N/A	X		X	●●○○○	●●○○○	●●●●○	●●●●○	●●●●○	●○○○○	●●●●○	
ESACOL® ED 5, 15, 16, 18	Low/Mid-Shear HPG (Brookfield & KU builders) - Easily dispersible - thickening with open-time and stabilisation against syneresis	HPG		Powder	N/A	X		X	●●○○○	●●○○○	●●●●○	●●●○○	●●●○○	●●●●○	●●○○○	
ESACOL® HD 15	Mid-Shear HPG (KU builders) - Hyper Dispersible = no neutralisation needed - thickening with open-time and stabilisation against syneresis	HPG		Powder	N/A	X		X	●●○○○	●●○○○	●●●●○	●●●○○	●●●○○	●●●●○	●●○○○	
ESACOL® ED 30X, 50X	New generation low/mid-shear HPG for medium and high PVC systems	HPG		Powder	N/A	X		X	●●○○○	●●○○○	●●●○○	●●●○○	●●●●○	●●●●○	○○○○○	
ESACOL® ED MAX	Mid-shear HPG (KU builder) - reduces spattering during the application of high quality paints with a roller	HPG		Powder	N/A	X		X	●●●○○	●●○○○	●●●●●	●●●○○	●●○○○	●●●●●	●●●●●	
ESACOL® HS 30R	Low/Mid-shear HPG (Brookfield & KU builder) - Improved alkali resistance for biocide-free systems and silicate paints	HPG		Powder	N/A	X		X	●●○○○	●●○○○	●●●○○	●●●○○	○○○○○	●●●●●	○○○○○	
ESACOL® HM 22	Low/Mod-shear HPG with high yield point offering strong suspending capability and water retention (for pastes)	HPG		Powder	N/A	X		X	●●●●○	●●○○○	●●●○○	●●●○○	●●●○○	●●●●○	●○○○○	
ESACOL® WOS	Thickener suitable for polar co-solvents, ideal for paint strippers, hydroalcoholic stains, and cleaning solutions.	HPG		Powder	N/A	X		X	●●●●○	●●○○○	●●●○○	●●●○○	●●○○○	●●●○○	○○○○○	
VISCOLAM® CMD 50	Low shear HSD - provides stabilisation and structures; ideal for putties and plasters	HSD		Emulsion in oil	48	X		X	●●●●○	●○○○○	●●●●●	●●●○○	●●●●●	●●○○○	○○○○○	
VISCOLAM® 8916	Low/mid shear ASE - reduces sagging; versatile, and not dependent on binders	ASE		Liquid VOC-free**	40	X	X	X	●●○○○	●●○○○	●●○○○	●●●●○	●●○○○	●●○○○	○○○○○	
VISCOLAM® 330	Low + high shear ASE - versatile and binder-independent; deal for reducing sagging and settling in spray, brush and roller applications	ASE		Liquid VOC-free**	30	X	X	X	●○○○○	●○○○○	●●○○○	●●●○○	●●●●●	●●○○○	●●●○○	
VISCOLAM® PF 330	Low+high shear ASE - versatile and binder-independent; deal for reducing sagging and settling in spray, brush and roller applications - biocide free suitable for paints and adhesives used in children toys	ASE		Liquid VOC-free**	30	X	X	X	●○○○○	●○○○○	●●○○○	●●●○○	●●●●●	●●○○○	●●●○○	
VISCOLAM® B91	ASE with moderate thickening efficiency and broad compatibility; binder-independent	ASE		Liquid VOC-free**	29	X	X	X	●●○○○	●●○○○	●●○○○	●●●○○	●●○○○	●●○○○	○○○○○	
VISCOLAM® 630	Low shear HASE - strongly shear-thinning; provides excellent anti-sagging and anti settling properties	HASE	X	Liquid VOC-free**	30	X	X	X	●●●○○	●●●○○	●○○○○	●●●●●	●●●●●	●●○○○	○○○○○	
VISCOLAM® 698	Low/medium shear HASE - pseudoplastic; delivers effective thickening and good anti-sagging properties	HASE	X	Liquid VOC-free**	30	X	X	X	●●●○○	●●●○○	●○○○○	●●●●○	●●●●○	●●●●○	○○○○○	
VISCOLAM® 600	Mid-shear HASE - moderate pseudoplasticity; KU builder ideal for in-can viscosity control	HASE	X	Liquid VOC-free**	30	X	X	X	●●○○○	●○○○○	●●●○○	●●●●○	●●●○○	●●●●○	○○○○○	
VISCOLAM® GP1	Mid-shear HASE - moderate pseudoplasticity; KU builder ideal for in-can viscosity control with enhanced colour acceptance	HASE	X	Liquid VOC-free**	33	X	X	X	●●○○○	●○○○○	●●●○○	●●●●○	●●○○○	●●●○○	○○○○○	

* development product
** VOC-free as <1g/kg
According to ISO 11890-2:2006
*** tbd = to be determinated
biobased

> 80%
> 60%
> 40%
> 20%

CMC	CarboxyMethyl Cellulose
HPG	HydroxyPropylGuar
HSD	Hydro Swelling Droplet
ASE	Alkali-Swellable (or Soluble) Emulsions
HASE	Hydrophobically modified Alkali-Swellable (or Soluble) Emulsions
HEUR	Hydrophobically modified Ethoxylated URethane (all are tin-free PU's)
BG	ButylGlycol
BDG	ButylDiGlycol
N/A	Non-Applicable

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VISCOLAM® 635	Mid/high shear HASE (KU and ICI builder) - improves brushability in high quality systems	HASE	X	Liquid VOC-free**	30	X	X	X	●●●●○	●●●●○	●●●●○	●●●●○	●●○○○	●●●○○	●●●○○	
VISCOLAM® NT 74	Hi-shear Newtonian HASE - ICI builder for semi-gloss and gloss formulations	HASE	X	Liquid VOC-free**	30	X	X	X	●●●●●	●●●●●	●●●●●	●●○○○	○○○○○	●●○○○	●●●●●	
VISCOLAM® PS 010 AIR	Strongly shear-thinning HEUR - delivers anti-sagging and anti-settling properties without compromising gloss and colour acceptance	HEUR	X	Liquid VOC-free**	40	X	X	X	●●●●●	●●●●○	●○○○○	●●●●●	●●●●●	●○○○○	○○○○○	
VISCOLAM® BIO PS 010 AIR*	Strongly shear-thinning HEUR - delivers anti-sagging and anti-settling properties without compromising gloss and colour acceptance - BIO-BASED	HEUR	X	Liquid VOC-free**	40	X	X	X	●●●●●	●●●●○	●○○○○	●●●●●	●●●●●	●○○○○	○○○○○	
VISCOLAM® PS 166	Mid-shear HEUR (KU builder) - reduces sagging, ideal for industrial spray applications	HEUR	X	Liquid in water/BG	40	X	X	X	●●●●●	●●●●●	●●●●○	●●●●○	●●○○○	●●●●○	●○○○○	
VISCOLAM® PS 167	Mid-shear HEUR (KU builder) - reduces sagging, ideal for industrial spray applications	HEUR	X	Liquid in water/ BDG	40	X	X	X	●●●●●	●●●●●	●●●●○	●●●●○	●●○○○	●●●●○	●○○○○	
VISCOLAM® PS 102	Mid-shear HEUR (KU builder) - more Newtonian than Viscolam PS 166 and PS 167, for improved leveling	HEUR	X	Liquid in water/ BDG	25	X	X	X	●●●●●	●●●●●	●●●●●	●●●●○	●○○○○	●●●○○	●●○○○	
VISCOLAM® PS 170 AIR	Low/mid shear HEUR (KU builder) - designed to maximize sagging and in-can viscosity control with very high pigment compatibility; ideal for modern systems	HEUR	X	Liquid VOC-free**	50	X	X	X	●●●●●	●●●●●	●●●●○	●●●●●	●●●●○	●●●●●	○○○○○	
VISCOLAM® BIO PS 170 AIR*	Low/mid shear HEUR (KU builder) - designed to maximize sagging and in-can viscosity control with very high pigment compatibility; ideal for modern systems - BIO-BASED	HEUR	X	Liquid VOC-free**	50	X	X	X	●●●●●	●●●●●	●●●●○	●●●●●	●●●●○	●●●●●	○○○○○	
VISCOLAM® PS 202 AIR	High-shear Newtonian HEUR (ICI builder) - Ideal for modern DYI formulations as well as industrial clear and pigmented systems applied by brush, roller, or curtain	HEUR	X	Liquid VOC-free**	20	X	X	X	●●●●●	●●●●●	●●●●●	●●○○○	○○○○○	●○○○○	●●●●○	
VISCOLAM® BIO PS 202 AIR*	High-shear Newtonian HEUR (ICI builder) - Ideal for modern DYI formulations as well as industrial clear and pigmented systems applied by brush, roller, or curtain - BIO-BASED	HEUR	X	Liquid VOC-free**	20	X	X	X	●●●●●	●●●●●	●●●●●	●●○○○	○○○○○	●○○○○	●●●●○	
VISCOLAM® PS 222 AIR	Highly efficient high-shear HEUR (ICI builder) – strongly Newtonian; ideal for high-quality waterborne coatings	HEUR	X	Liquid VOC-free**	25	X	X	X	●●●●●	●●●●●	●●●●●	●○○○○	○○○○○	●●○○○	●●●●●	
VISCOLAM® BIO PS 222 AIR*	Highly efficient high-shear HEUR (ICI builder) – strongly Newtonian; ideal for high-quality waterborne coatings - BIO-BASED	HEUR	X	Liquid VOC-free**	25	X	X	X	●●●●●	●●●●●	●●●●●	●○○○○	○○○○○	●●○○○	●●●●●	

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BG	ButylGlycol
BDG	ButylDiGlycol
N/A	Non-Applicable

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