

// BU CONSTRUCTION & PAINTS //



# Performing Solutions

// Additives for Paints //



**lamberti**  
chemical specialties

# The Lamberti Group

Lamberti is a private, Italian chemical company, established in 1911 and engaged in R&D, production and supply of auxiliary, fine chemicals and specialty chemicals for the industry. It has about 1300 employees worldwide.

The core technologies of the Lamberti Group are:

- polysaccharides derivatives (cellulosics and other hydrocolloids);
- water-based synthetic polymers (polyacrylics and water-based polyurethanes);
- oleochemicals (surfactants, fatty derivatives and functional formulations).

Our primary production technologies are supported by dedicated R&D laboratories and by state-of-the-art pilot plants.

The Group has also established in those countries where it is present with subsidiaries a number of application laboratories that are dedicated to the fine tuning of each peculiar application, as a function of the final industrial use or the specific needs of the customer. Products are sold in over 15 different markets: cosmetics & personal care, agro-chemistry, oil field operations, textile, leather, paper, ceramics, paints & coatings, construction, surfactants for industrial applications, etc.

		Cellulosics	Hydrocolloids	Acrylics	Water-based Polyurethanes	Oleochemicals	Pigments & Enzyme Formulations
Geo Science	Agrochemicals & Veterinary	●	●	●	●	●	●
	Cosmetics & Personal Care	●	●	●	●	●	
	Homecare and I&I	●	●	●	●	●	
	Food Industry	●	●				
	Oil & Gas	●	●	●		●	
	Mining	●	●	●		●	
Material Science	Civil Engineering	●	●	●		●	
	Ceramics	●		●	●	●	●
	Construction & Paints	●	●	●	●	●	
	Paper	●	●	●	●	●	●
	Leather Finishing			●	●	●	●
	Soft & Textile Coating Compounds			●	●	●	
	Industrial Coating			●	●	●	
	Printing Ingredients for Textile & Digital Industrial Inks	●	●	●	●	●	●
Surfactants for Polymerization & Chemical Industry			●		●		

Natural Polymers ■ Synthetic Polymers ■ Oleochemistry ■ Others ■

## Certifications and more

**Quality Management System** - certification under ISO 9001:2008 for Lamberti SpA, Unichem SpA and the foreign affiliates in Brazil, Spain, China, India.

**Environmental Management System** - certification under ISO 14001:2004 for Lamberti SpA.

**EFfCI GMP** - certification under EFfCI GMP (Standard for Cosmetic Ingredients): Viguzzolo, Zanica.

**AEO** - Lamberti S.p.A. is certified as an Authorized Economic Operator, according to the European Community Customs Code.

**Work Safety Management System** - certification under OHSAS 18001 for Lamberti SpA.

**Responsible Care** - Lamberti SpA is certified under this program.

**REACH** - The Lamberti Group is committed to guarantee the registration and proper management of substances and products marketed, as requested by REACH Regulation (Reg. 1907/2007/EEC). For more details about Lamberti activities on REACH see: [www.lamberti.com/about\\_us/reach.cfm](http://www.lamberti.com/about_us/reach.cfm)

**RSPO** - certification under the RSPO Supply Chain Certification Standard, version June 2017: Viguzzolo



# Paints & DIY Specialties

In the paint manufacturing process, many chemical additives are used to build and stabilize the interaction between pigments, fillers, extenders, latexes and water. The introduction of natural and synthetic thickeners, antifoams and dispersing agents, as well as other additives, improves

the production, the storage and the final application of water borne paints. Lamberti today produces and markets one of the widest range of additives for this field, thanks to its leading technologies and decades-long experience in development, meeting customers' requirements.

- Customized and Innovative Solution
- Interactive Technical Assistance
- Glocal Orientation
- Consolidated Distribution Network

## Do it yourself (DIY) products and their applications

- highly recommended
- suitable

Product	Appearance	GYPSUM					CEMENT							PASTE & LIQUID SYSTEMS												
		Plasterboard adhesive	Plasterboard joint filler / joint compound	Skimcoat	Gypsum block adhesive	Crack filler	Cornice adhesive	Self-levelling	Plaster / Monocouche	Skim coat	Tile adhesive	Grout	Bricks adhesive	Self-levelling overlay	Self-levelling screed	Thermal insulation system	Bricks mortar	Coloured rendering	Paste putty / Crack filler	Plasterboard joint filler / joint compound	Skimcoat	Water borne paints	Paste adhesive	Liquid membrane	Primer	Anticarbonation
ESA-ONE PUTTY S	P	●																								
ESA-ONE JOINT QUICK	P		●	○																						
ESA-ONE JOINT SP	P		●	○																						
ESA-ONE EL 800	P			●																						
ESA-ONE EL 122	P			●																						
ESA-ONE BRICK M8	P				●		○																			
ESA-ONE FILL S	P					●																				
ESA-ONE CG49	P																									
ESA-ONE FACADE	P								●																	
ESA-ONE ELM	P									●																
ESA-ONE FILL READY	P																	●								
ESA-ONE JOINT READY	P																		●	○						
ESA-ONE FINISH READY	P																			●						
ESATEC LG 14/N & PU24	L																							○	●	

## Paints additives and their applications

● highly recommended

○ suitable

		Description	Appearance / Active or solid content	
Natural Thickeners & Rheological Modifiers	ESACOL ED 5	Chemically modified polysaccharide with delayed solubility	Flowing powder	
	ESACOL ED 10	Chemically modified polysaccharide with delayed solubility	Flowing powder	
	ESACOL ED 15	Chemically modified polysaccharide with delayed solubility	Flowing powder	
	ESACOL HD 15	Chemically modified polysaccharide with self hydrating property	Flowing powder	
	ESACOL ED 16	Chemically modified polysaccharide with delayed solubility	Flowing powder	
	ESACOL ED 18	Chemically modified polysaccharide with delayed solubility	Flowing powder	
	ESACOL ED 20 W	Chemically modified polysaccharide with delayed solubility	Flowing powder	
	ESACOL ED 30 AP	Chemically modified polysaccharide with delayed solubility	Flowing powder	
	ESACOL ED 30 W	Chemically modified polysaccharide with delayed solubility	Flowing powder	
	ESACOL ED 50 W	Chemically modified polysaccharide with delayed solubility	Flowing powder	
	ESACOL ED SPECIAL	Chemically modified associative polysaccharide with delayed solubility	Flowing powder	
	ESACOL HM 22	Chemically and highly modified associative polysaccharide	Flowing powder	
	ESACOL HS 30 R	Chemically modified polysaccharide with delayed solubility	Flowing powder	
Carboxy Methyl Cellulose (CMC)	CARBOCEL MM 15	Low molecular weight purified carboxymethyl cellulose	Flowing powder	
	CARBOCEL MM 500 HD	Medium molecular weight purified carboxymethyl cellulose	Flowing powder	
	CARBOCEL MA 300 HD	High molecular weight purified carboxymethyl cellulose	Flowing powder	
	CARBOCEL MA 500 HD	Very high molecular weight purified carboxymethyl cellulose	Flowing powder	
	CARBOCEL HD 20000	Medium-high molecular weight purified carboxymethyl cellulose	Flowing powder	
	CARBOCEL TAA 100	Medium molecular weight technical grade carboxymethyl cellulose	Flowing powder	
Synthetic Thickeners	VISCOLAM 630	HASE	Milky liquid / 29% - 31%	
	VISCOLAM 4948	ASE	Milky liquid / 29% - 31%	
	VISCOLAM 330	ASE	Milky liquid / 29% - 31%	
	VISCOLAM 600	HASE	Milky liquid / 29% - 31%	
	VISCOLAM GP1	HASE	Milky liquid / 32% - 34%	
	VISCOLAM 635	HASE	Milky liquid / 29.5% - 30.5%	
	VISCOLAM NT 74	HASE	Milky liquid / 29% - 31%	
	VISCOLAM B 91	ASE	Milky liquid / 28% - 30%	
	VISCOLAM CMD 50	HSD	Viscous Liquid / Min. 48%	
	VISCOLAM PS 166	HEUR	Opalescent liquid / 39% - 41%	
	VISCOLAM PS 167	HEUR	Opalescent liquid / 39% - 41%	
	VISCOLAM PS 102	HEUR	Opalescent liquid / 24% - 26%	
	VISCOLAM PS 170 AIR	HEUR	Opalescent liquid / Min. 46.5%	
	VISCOLAM PS 202	HEUR	Milky liquid / 19% - 21%	

	Brookfield viscosity / Main spec.	High PVC			Enamel	Coloured Renderings and Decorative Paints	Putty	Waterproofing Membrane & Concrete Flooring	Primer	Features & Benefits
		Water Based Paints	Medium PVC	Low PVC						
	3000 - 6000 mPa*s (2% w/w solution, 20 °C, 20 rpm, pH 9)	●				○	○	○	○	Low viscosity HPG with pseudoplastic behaviour
	8000 - 10000 mPa*s (2% w/w solution, 20 °C, 20 rpm, pH 9)	●	●			○		●	○	Medium/low viscosity HPG with good stability/yield ratio
	12000 - 14000 mPa*s (2% w/w solution, 20 °C, 20 rpm, pH 9)	●	●				●	○		Medium viscosity HPG for multi-purpose applications
	12000 - 14000 mPa*s (2% w/w solution, 20 °C, 20 rpm, 2h)	●	●				●	○		Self hydrating grade swelling in neutral conditions No alkali addition is required
	12000 - 16000 mPa*s (2% w/w solution, 20 °C, 20 rpm, pH 9)		○			●				Medium viscosity HPG highly recommended for decorative paints
	17000 - 21000 mPa*s (2% w/w solution, 20 °C, 20 rpm, pH 9)		●	○		○	●			Medium/high viscosity HPG with enhanced pseudoplastic behaviour
	19000 - 21000 mPa*s (2% w/w solution, 20 °C, 20 rpm, pH 9)		●	●			●			High viscosity HPG with high yield in low PVC paints
	19000 - 21000 mPa*s (2% w/w solution, 20 °C, 20 rpm, pH 9)		●	●			●			High viscosity HPG with high yield in low PVC paints with anti-dust treatment
	24000 - 27000 mPa*s (2% w/w solution, 20 °C, 20 rpm, pH 9)		●	●			●			Very high viscosity HPG with pseudoplastic behaviour
	≥ 27000 mPa*s (2% w/w solution, 20 °C, 20 rpm, pH 9)		●	●			●			Very high viscosity HPG with very high yield in low PVC paints
	8000 - 10000 mPa*s (2% w/w solution, 20 °C, 20 rpm, pH 9)		●	●						HPG with associative effect
	> 4500 mPa*s (1% w/w solution, 20 °C, 20 rpm)		○	●			●			Highly associative thickener suitable for pseudoplastic & shear thinning effects
	6000 - 10000 mPa*s (2% w/w solution, 20 °C, 20 rpm, pH 9)	●	○			○		●	●	Alkali resistant HPG suitable for lime and silicate based paints
	100 - 200 mPa*s (2% w/w solution, 20 °C, 60 rpm)	●	○			●	○			Low viscosity CMC suitable for decorative and flakes base paint
	3000 - 6500 mPa*s (2% w/w solution, 20 °C, 60 rpm)	●	○			●	○			Medium viscosity CMC suitable for decorative and flakes base paint Highly dispersible in water
	3000 - 4500 mPa*s (1% w/w solution, 20 °C, 30 rpm)	●	○	○		●	●			High viscosity CMC suitable for decorative paints Highly dispersible in water
	4500 - 6500 mPa*s (1% w/w solution, 20 °C, 30 rpm)	○	○	●		●	●			Very high viscosity CMC suitable for decorative paints Highly dispersible in water
	7000 - 9000 mPa*s (2% w/w solution, 20 °C, 20 rpm)	●	○	○		●	●			High viscosity CMC suitable for decorative paints Highly dispersible in water
	500 - 2000 mPa*s (1% w/w solution, 20 °C, 30 rpm)	●	○				●			Medium viscosity CMC suitable for water base paints and putties
	Max. 200 mPa*s (25 °C, 50 rpm)	●	●			○	●	○		Low-medium shear thickener with good anti settling properties
	Max. 200 mPa*s (25 °C, 50 rpm)	●	●			●				Acrylic thickener with strong effect at high and low shear rates, and reduced dirty pick up
	Max. 200 mPa*s (25 °C, 20 rpm)	●	●			●				Acrylic thickener with strong effect at high and low shear rates Available biocide free version (PF)
	Max. 200 mPa*s (25 °C, 20 rpm)	●	●			●	●			Medium shear thickener with anti spattering and anti settling properties
	Max. 200 mPa*s (25 °C, 50 rpm)	●	●			●				Acrylic thickener suitable for textured and highly thixotropic paints and industrial primers
	Max. 25 mPa*s (25 °C, 60 rpm)	○	●	●	●			○		Mid-high shear with high leveling and antispattering properties
	150 - 650 mPa*s (5% solution @ pH=9.0, 25 °C, 20 rpm)		○	●	●			●	○	ICI builder with newtonian behaviour
	Max. 350 mPa*s (25 °C, 50 rpm)	○	●	●	●			○		High shear with high leveling and antispattering properties
	Max. 3000 mPa*s (20 °C, 20 rpm)					●	●			High viscosity inverse emulsion, pH independent
	Max. 8000 mPa*s (25 °C, 10 rpm)		○	●	●	●		●		Medium shear thickener HEUR It contains Butyl Glycol
	Max. 8000 mPa*s (25 °C, 10 rpm)		○	●	●	●		●		Medium shear thickener HEUR It contains Butyl di-glycol
	1000 - 5000 mPa*s (25 °C, 10 rpm)		○	●	●	●		●		Medium shear thickener HEUR It contains Butyl di-glycol
	Max. 8000 mPa*s (25 °C, 10 rpm)		○	●	●	●		●		Highly effective KU builder, VOC/SVOC & solvent free Excellent color development and in can stability
	3000 - 6000 mPa*s (25 °C, 10 rpm)		○	●	●	●		●	●	High shear ICI builder with newtonian behaviour VOC/SVOC & solvent free

## Paints additives and their applications

● highly recommended

○ suitable

		Description	Appearance / Active or solid content	
Anti Foaming Agents	DEFOMEX 108	Polyglycol ester derivative	Amber liquid	
	DEFOMEX MRG 30	Hydrophobic silica and organic polymers in mineral oil	Homogeneous liquid	
	DEFOMEX 870	Mineral oil-water emulsion of synthetic polymers	Amber liquid	
	DEFOMEX 1510	Silica and organic polymers in silicon oil	Amber liquid	
	DEFOMEX 2033N	Hydrophobic silica and organic polymers in mineral/natural oil	Amber liquid	
	DEFOMEX 2043	Hydrophobic silica and organic polymers in mineral oil	Amber liquid	
	DEFOMEX 2053ECO	Hydrophobic silica and organic polymers in vegetal oil	Orange/brownish liquid	
	DEFOMEX 2063	Organic polymers in mineral and natural oil	Amber liquid	
	DEFOMEX WE60	Water emulsion of organic polymers dispersed in mineral oil	Amber liquid	
Dispersing Agents	REOTAN HS	Polycarboxylic acid sodium salt	Yellow liquid / 42% - 44%	
	REOTAN L	Polycarboxylic acid sodium salt	Yellow liquid / 44% - 46%	
	REOTAN L3	Polycarboxylic acid sodium salt	Yellow liquid / 29% - 31%	
	REOTAN LA	Polycarboxylic acid ammonium salt	Yellow liquid / 39% - 41%	
	REOTAN LAM	Polycarboxylic acid ammonium salt	Pale green liquid / 39% - 41%	
Water Repelling Agents	CERFOBOL R/75	Emulsion of organic polymers	Milky emulsion	
Wetting Agents	VERAPON B 110	Ethoxylated fatty acids	Clear liquid / > 97%	
	VERAPON B 115	Ethoxylated fatty acids in water	Clear liquid / 49% - 51%	
	VERAPON L61	Ethoxylated and propoxylated copolymer	Clear liquid	
	VERAPON 490	Alkylether polyphosphoric ester	Yellowish liquid / 98%	
Plasticizers	ESAPLAST G12	Synthetic polymers	Yellowish liquid	
	ESAPLAST ECO 30	Synthetic polymers	Clear liquid	
Hyperdispersants	FLUIJET 1725	Synthetic polymer with pigment affine groups	Clear liquid / 39% - 41%	
Binders	ESACOTE PU 470	Poly-urethane dispersion	Opalescent liquid / 39% - 41%	
	ESACOTE PU 475	Poly-urethane dispersion	Opalescent liquid / 39% - 41%	
	ESACOTE GT 58	Poly-urethane dispersion	Opalescent liquid / 39% - 41%	
	ESACOTE PU 147	Aliphatic poly acryl-urethane based on polyether diols	Opalescent liquid / 34% - 36%	
	ESACOTE PU 148	Aliphatic poly acryl-urethane based on polyether diols	Opalescent liquid / 34% - 36%	
	ESACOTE PU 61	Aliphatic poly-urethane dispersion based on polycarbonate diols	Slig. cloudy liquid / 34% - 36%	
	ESATEC 612	Aliphatic poly acryl-urethane based on polycarbonate diols	Opalescent liquid / 36% - 40%	
Crosslinkers	CATALYST AT5/N	Polyaziridine	Clear liquid	
	CROSSLINKER 08	Poly-isocyanate	Transparent liquid	

	Brookfield viscosity / Main spec.	High PVC	Medium PVC	Low PVC	Enamel	Coloured Renderings and Decorative Paints	Putty	Waterproofing Membrane & Concrete Flooring	Primer	Features & Benefits
		Water Based Paints				Paste & Liquid Systems				
	Max. 400 mPa*s (20 °C, 20 rpm)		●	●	●	●				Good defoaming efficiency in production and application of wet systems
	30 - 200 mPa*s (20 °C, 20 rpm)			●	●	●			●	Very effective in different high quality coating systems
	700 - 1700 mPa*s (20 °C, 20 rpm)	●	○						●	Good defoaming efficiency in production and application of wet systems
	1200 - 1900 mPa*s (20 °C, 20 rpm)			○		●	●			Good defoaming efficiency in production and application of wet systems
	500 - 1500 mPa*s (20 °C, 20 rpm)	○	●	●		●		●		Good defoaming efficiency in production and mainly in application of wet systems
	150 - 500 mPa*s (20 °C, 20 rpm)	○	●	●		●		●		Good defoaming efficiency in production and application of wet systems
	800 - 1600 mPa*s (20 °C, 20 rpm)	○	●	●		●		●		Good defoaming efficiency in production and mainly in application of wet systems
	400 - 1500 mPa*s (20 °C, 20 rpm)		●	●		●		●	●	Good defoaming efficiency in production and mainly in application of wet systems
	2500 - 3500 mPa*s (20 °C, 20 rpm)	●	○				○		○	Good defoaming efficiency in production of wet systems
	100 - 400 mPa*s (25 °C, 20 rpm)	●	●	○		●	○			Highly efficient dispersant with excellent stability, suitable for small particles
	600 - 1300 mPa*s (25 °C, 20 rpm)	●	●	○		●	●			Highly efficient dispersant with excellent stability, suitable for coarser particles
	< 300 mPa*s (25 °C, 20 rpm)	●	●	○		●	●			Highly efficient dispersant with excellent stability, suitable for coarser particles
	100 - 600 mPa*s (25 °C, 20 rpm)			●	●					Highly efficient and versatile dispersant suitable for high gloss formulations
	Max. 500 mPa*s (25 °C, 20 rpm)			●	●					Highly efficient dispersant suitable for high gloss formulation containing coarser particles
	Max. 100 mPa*s (20 °C, 100 rpm)	●	●	●		●	●		●	Multi purpose water repellent product
	Max. 200 mPa*s (20 °C, 20 rpm)	●	●	●	●	●	●	●	●	Wetting agent suitable for improving colour acceptance of paints
	Max. 500 mPa*s (20 °C, 20 rpm)	●	●	●	●	●	●	●	●	Wetting agent suitable for improving colour acceptance of paints Improved stability at low temperature
	Max. 500 mPa*s (20 °C, 20 rpm)	●	●	●	●	●	●	●	●	High performing wetting agent with anti foaming properties and compatibilizer for pigment pastes
	na		●	●	●	●		●		Wetting agent suitable for low PVC formulations containing PUDs as well for water proofing membranes
	100 - 250 mPa*s (20 °C, 100 rpm)	●	○			●	○	●		Plasticizer for membranes, water and coalescing repellent agent for WB paints
	100 - 250 mPa*s (20 °C, 100 rpm)	●	○			●	○	●		Plasticizer for water proofing membranes labelling free
	na			●	●					Super dispersant especially recommended for stabilizing organic pigments and carbon black in water
	Max. 300 mPa*s (25 °C, 50 rpm)					●		●		Multipurpose PUD with low water absorption, good elasticity and highly compatible with acrylic binders
	Max. 300 mPa*s (25 °C, 50 rpm)					●		●		PUD with low water absorption, high elasticity and highly compatible with acrylic binders
	Max. 300 mPa*s (25 °C, 50 rpm)					●		●		PUD with low water absorption, good elasticity and low shrinkage (NEP free)
	Max. 600 mPa*s (25 °C, 50 rpm)				●	●		●	●	Co-polymer able to give tough, transparent and glossy film typically suggested for flooring applications
	Max. 200 mPa*s (25 °C, 50 rpm)			●	●	●		●	●	Pyrrolidone free co-polymer suitable for flooring and high quality paint
	Max. 600 mPa*s (25 °C, 50 rpm)							●		Pyrrolidone free PUD suitable for concrete flooring and WP membrane combined with elastic PUD grades
	na							●		Co-polymer specifically developed for coatings with anti-stain properties for parking and warehouses
	Solid content 105 °C 65-65%			●	●			●		Highly effective crosslinker, pot life 8-10 hours
	Solid content 120 °C 69-71%			●	●			●		Highly effective crosslinker, pot life 2-4 hours

## Lamberti in the World

### EUROPE

#### Italy

Gallarate  
(Headquarters &  
Commercial Offices)

Albizzate  
(Main production facilities,  
Technological research center)

Fiorano Modenese  
Nerviano  
Rezzato  
Trissino  
Viguzzolo  
Zanica

#### France

Liergues

#### Germany

Bammental

#### Poland

Tomaszów Mazowiecki

#### Russia

Moscow

#### Spain

Onda (Castellón)

#### Turkey

Istanbul

### AFRICA

#### South Africa

Westmead

### ASIA

#### China

Hong Kong  
Shanghai

#### India

Rajkot

#### Indonesia

Bekasi

#### South Korea

Seoul

#### United Arab Emirates

Dubai

### AMERICAS

#### Argentina

Buenos Aires

#### Brazil

Nova Odessa

#### Canada

Red Deer

#### Colombia

Bogotá

#### Mexico

Querétaro

#### United States

Chattanooga  
Conroe  
Conshohocken  
Hungerford  
Waukegan

### Lamberti Group

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