

# Solutions for architectural paints

## **Binders for trim paints and varnishes**

- ESACOTE® as sole binder for high quality waterborne trim paints for wood, metal, and plastic substrates.
- ESACOTE® used as co-binder to boost existing system and excellent compatibility with various other binder chemistries.

ESACOTE® are also available in BIO based grades.

## **High traffic waterborne binders for floors**

- ESACOTE® PUDs for 1K and 2K high traffic concrete top-coats for buildings, warehouses, parking structures and also for varnishes applied on wood floors.
- Specific solutions for anti-tire tracks (hot pneumatic traces) for white and coloured public parking's.

## **Performance waterborne binders for waterproofing and cool roofing**

- ESACOTE® PUDs and acrylic hybrid-urethane dispersion binders with inherent elasticity for long-lasting efficiency of roof, terrace, balconies protection.
- Built-in elasticity thanks to polymer structure without use of external plasticizer. Our dispersions provide permanent elasticity, avoid blocking and no brittle effect under adverse expositions.
- For pigmented (for roofs or cool roofing systems) or transparent systems (on ceramics, natural stones or concrete).

For thick membranes or thin films.

## **Matt/Soft touch with haptic and mechanical performances toolbox**

- ESACOTE® PUDs inherently matt with a variety of haptic effects from silky to rubbery.
- DECOSPHAERA®(PU) / SPHEROMERS® (AC) polymeric beads for deep matt, burnish resistance, scuff & scratch resistance as well as for special texturized effect for biggest particle sizes. Transparent or Coloured in bulk
- ADIWAX, wax emulsions, synthetic or natural-based, for matt or scuff improvement in more economic paint & varnish systems.

ESACOTE® inherently matt and DECOSPHAERA® and ADIWAX are also available in BIO based grades.

## **Water-borne rheology expertise 360°**

- From powder to liquid form and direct or inverse emulsions.
- From ionic to non-ionic grades.
- From non-associative versatility to associative efficiency.
- From high pseudoplastic to pure newtonian flow behaviour.
- From synthetic to pure natural.

Lamberti is a one-stop-shop to provide you the optimum balance of performance / sustainability / cost with our extensive portfolio of rheological modifiers additives VISCOLAM® (ASE/HASE/HSD acrylics), VISCOLAM® PS (HEUR associative PU's), ESACOL® (HPG guar derivatives) and CARBOCEL® (CMC CarboxyMethyl Celluloses).

## Water based binders & additives for architectural sector information & typical value chart






		chemical properties							film properties			
		Trim or co-binder	Waterproofing (WP)	Flooring	Chemical nature	Solvent (%)	Solvent type	Dry content (%)	pH	MFFT (°C)	hardness (sec König (K) Persoz (P))	Elongation at break (%)
<b>Water based acrylic emulsions</b>												
ESACOTE AC 126	Low MFFT but quite hard binder providing wide compatibility with additives	x			AC	0	Solvent free	40	4.0 - 6.0	≈19	80 (K)	≈300
ESACOTE AMC	Self crosslinking with good adhesion and high flexibility ideal for primers	x	x	x	AC	0	Solvent free	37,5	7.5-8.5	≈0	7 (K)	NA
ESACOTE AC 200	Self crosslinking with good adhesion, for primers formulations	x	x	x	AC	0	Solvent free	40	8.0-10.0	≈12	38 (K)	≈300
ESACOTE AC 202*	Very hard with good chemical and stain resistance also even in 1K	x			AC	0	Solvent free	43	7.0 - 8.0	≈50	85(K)/180 (P)	NA
ESACOTE AC 302	Hydrolylated ideal for PUR-2KWB on metal, wood, concrete	x		x	AC	0	Solvent free	50	7.0 - 8.0	≈50	50(K)/95(P)	NA
<b>Water based urethane acrylic dispersions</b>												
ESACOTE PU 147	Glossy/hard and versatile	x	x	x	AC/PE	5	NEP	35	7.5-8.5	≈0	136(K)/254(P)	≈230
ESACOTE PU 148	Glossy/hard and versatile pyrrolidone-free	x	x	x	AC/PE	4,5	DPGDME	35	7.0-9.0	≈0	93(K)/180(P)	≈230
ESACOTE UA 7023	Self-crosslinking special hard top-coat	x		x	AC/PC	0	Solvent free	35	7.0-9.0	≈60	140(K)	≈130
ESACOTE UA 8029*	Glossy/hard and versatile - neutral for clear on wood	x		x	AC/PE	0	Solvent free	39	7.0-9.0	≈42	140(K)	NA
ESACOTE UA 8048*	Glossy/hard and versatile - neutral for clear on wood	x		x	AC/PE	0	Solvent free	35	7.0-9.0	≈50	140(K)	≈250
ESATEC 612	2K top-coat flooring anti-tiretracks in parking structures	x		x	AC/PC	4,5	DPGDME	38	7.0-9.0	≈23	NA	NA
<b>Water based BiOBASED polyurethane dispersions</b>												
ESACOTE BIO 4900*	Highly flexible binder - 62% Bio based carbon content	x		x	PES	<1	MEK	35	7.0-9.0	≈15	88 (K)	≈270
ESACOTE BIO 148*	Glossy/hard and versatile - 33% Bio based carbon content	x		x	AC/PE	4,5	DPGDME	35	7.0-9.0	≈15	100 (K)	≈230
ESACOTE BIO 118	Hard binder - 33% Bio based carbon content	x		x	PES	8	DPGDME	32	7.5-8.5	≈43	150 (K)	NA
<b>Water based polyurethane dispersions</b>												
ESACOTE PU 470	Water proofing, clear or pigmented, low water uptake	x	x	x	PE	4	NEP	40	7.0-9.0	≈0	31(K)/62(P)	≈600
ESACOTE PU 472	Water proofing pigmented, pyrrolidone-free	x	x	x	PE	4	DPGDME	35	7.0-9.0	≈0	28(K)/48(P)	≈700
ESACOTE PU 475	Water proofing, clear or pigmented, extended elongation	x	x	x	PE	3,6	NEP	40	7.0-9.0	≈0	29(K)/54(P)	≈800
ESACOTE PU 5181	Water proofing, clear or pigmented, high flexibility, lowest water uptake	x	x	x	PE	4	NBP	40	7.0-9.0	<5	35(K)	≈500
ESACOTE ST 47	Wider pH stability, high solids	x	x		PES	<1	Acetone	50	8.0-10.0	<0	8(K)/23(P)	≈800
ESACOTE PU 5018	High solid, high elasticity, good water resistance	x	x		PE	0	Solvent free	59	7.0 - 9.0	≈0	33(K)	≈500
ESACOTE PU 61	Top-coat antiscratch / Flooring 1K	x		x	PC	8	DPGDME	35	7.0 - 9.0	25	127(K)	≈200
ESACOTE PU 77	Improved mechanical / chemical resistances	x		x	PC	<0,5	MEK	35	7.0 - 9.0	35	105(K)	≈250
ESACOTE PU 16	Concrete top coat anti-carbonation			x	PE	4,9	NEP	36	7.0 - 9.0	≈0	85(K)	≈200
ESACOTE PU 24	Concrete top coat anti-carbonation, pyrrolidone-free			x	PE	5,5	DPGDME	35	7.5-9.5	≈0	60(K)	≈350
<b>Water based INHERENTLY MATT polyurethane dispersions</b>												
ESACOTE PU 940	Matt, transparent and UV resistant	x			PC	2	DPGDME	28	7.0-9.0	≈0	46(K)/90(P)	NA
ESACOTE PU 980	Matt with silky touch	x			PE	0	Solvent free	32	8.0-9.0	≈0	35(K)/65(P)	≈250
ESACOTE BIO 9001*	Matt with silky touch - 66 % Bio based carbon content	x			PE	0	Solvent free	32	8.0-9.0	0	35(K)/65(P)	≈250

*	development product	PES	polyester
AC	acrylic	NA	not applicable
PU	polyurethane	FCMD	food contact material declaration available
PC	polycarbonate	DPGME	dipropylene glycol methyl ether
PE	polyether	DPGDME	dipropylene glycol dimethyl ether

This information is given in good faith and to the best of our knowledge. Every user of our products is responsible as regards the observation of all legal regulations including patent laws. Detailed information on handling and specific precautions to be observed in the use of the product can be found in our relevant Health and Safety Information Sheets.

## Water based binders & additives for architectural sector

### information & typical value chart

Crosslinkers		Physico-chemical properties			
CATALYST AT5/N	High MW polyaziridine crosslinker for extended pot life	35	DPGME	65	Water soluble - for AC and PUDs
CROSSLINKER 08	Water dispersible aliphatic polyisocyanate - NCO Content: 11% as supplied	30	Propylene carbonate	70	Easily dispersible - for AC and PUDs
CROSSLINKER 013	Water dispersible aliphatic polyisocyanate - NCO Content: 11% as supplied	30	DPGME	70	Easily dispersible - for AC and PUDs
Adhesion Promoter		Physico-chemical properties			
CROSSLINKER PU	Water dispersible organosilane improved adhesion on difficult mineral substrates through chemical bonding				
Plasticizers		Physico-chemical properties			
ESAPLAST G12	Polymeric plasticizer phthalate-free for AC/ST binders	Polymer	Liquid		Improve binder elongation, specially in waterproofing
ESAPLAST ECO 30	Polymeric plasticizer phthalate-free for AC/ST binders	Polymer	Liquid		Alternative to G12 without any labelling
LAGOFLEX C-1	Polymeric plasticizer phthalate-free for PUD binders	Polymer	Liquid		Improve applicability of our PUD at low temperature
Rheological modifiers (for more details of separate Leaflet dedicated to Rheological additives for Coating/Paint/Adhesive/Sealants)		Physico-chemical properties			
CARBOCEL®	 Low/Mid-Shear CarboxyMethylCelluloses (Technical & Purified grades)	CMC	Powder		Ionic - natural-based - Brookfield and KU builder or film former
ESACOL® ED	 Mid-Shear non-ionic HPG - Easy Dispersible with various viscosity including anti-spattering	HPG	Powder		Non-ionic - natural based - KU builder with open-time
ESACOL® HD	 Mid-Shear non-ionic HPG - Hyper Dispersible that do not need neutralisation to swell	HPG	Powder		Non-ionic - natural based - KU builder
ESACOL® HS	 Mid-Shear non-ionic HPG - Improved alkali resistance	HPG	Powder		Non-ionic - natural based - for biocide-free systems and silicate paints
VISCOLAM® CMD	Very Low-Shear HSD	AC	Liquid		Anionic - synthetic - stabilisation - ideal for putties
VISCOLAM®	ASE & HASE non-associative & associative ionic acrylic rheological additives	AC	Liquid		Anionic - synthetic - from low to high shear
VISCOLAM® PS	Associative non-ionic rheological additives	PU	Liquid		Non-ionic - synthetic - from low to high shear
VISCOLAM® BIO PS*	 Associative non-ionic rheological additive with very high content of BIO-based raw material	PU	Liquid		Non-ionic - synthetic with BIO-based ingredients from low to high shear
Matting agents & Effect pigments (for more details of separate Leaflet dedicated to Matting Beads)		Physico-chemical properties			
DECOSPHAERA® & SPHEROMER®	Synthetic microbeads for high performance resistance matt, haptive & decorative effects	PU or AC	Powder		Synthetic - exist in various size, chemistries up to BIO-based versions even in colored in bulk versions
Hydro-repellent		Physico-chemical properties			
CERFOBOL® R/75	Synthetic waxes special preparation with hydrorepellency properties	Polymer	Liquid		Short/long term Water Repellent used as anti snail tracks & early rain resistance for façade paints
Wetting & Dispersing agents		Physico-chemical properties			
REOTAN®	Classic dispersing agent available in various Mw, neutralisation form and solid content	AC	Liquid		Synthetic for pigments (mostly inorganic), fillers and extender dispersion
Surfactants for paint & coating		Physico-chemical properties			
VERAPON®, FLUIJET®, POLIROL ...	Wetting & Dispersing additives or colorant compatibilizers and Surface wetting agents	various	Liquid		Non-ionic & ionic surfactants, hyperdispersants
Pigment Concentrates (for more details of separate Leaflet dedicated to Pigment Dispersions)		Physico-chemical properties			
NEOPRINT®	Pigment dispersions	various	Liquid		Only available in Americas
Defoamers		Physico-chemical properties			
DEFOMEX®	Defoamers for water-borne paints based on vegetal or mineral oils or based on polymers	various	Liquid		Foam Destruction and/or Prevention in Paints and Varnishes
Wax dispersions		Physico-chemical properties			
ADIWAX	Wax dispersions for solvent-borne & water-borne systems	various	Liquid		

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