

Solutions for waterborne synthetic materials



lamberti.com

Overcoat and protective

- Designed for high adhesion to PVC and PU based synthetic materials for automotive, contract, accessories, bags and shoes.
- ESACOTE® PVC top finish, pre formulated components for improving the overcoating performance on printed or pigmented PVC.
- ROLFLEX® waterborne polyurethane and acrylic film forming building blocks to create high performing formulations.
- Inherently matt waterborne film forming polymers to pass the high standard in abrasion and flexibility.
- Easy to be formulated.
- Specific grades with Low VOC.
- Outstanding flexibility and abrasion resistance.
- Chemical and thermal resistance along with light fastness.
- Specific grades certified **ZDHC level 3** and **BLUESIGN® approved**.

Skin & adhesives

- ROLFLEX® Skin and Adhesives are waterborne polyurethanes and acrylic dispersions to maximize the design freedom.
- High solid waterborne polyurethanes for high mechanical resistance foam and coating.
- Boosted by ROLFLEX® blocked isocyanate crosslinkers to improve the performances and fastness and by VISCOLAM® rheology modifiers to easily run on every machine.
- Waterborne polyurethane dispersion highly compatible with pigment dispersions for intermediate layers.
- Dry adhesive soft and elastic for lamination temperature starting from 110°C to higher.
- Wet adhesive for fast drying and high hydrolysis resistance.
- Specific grades solvent free.
- Specific grades certified **ZDHC level 3** and **BLUESIGN® approved**.

Matting agent

- DECOSPHAERA® polyurethane beads are designed for being easily formulated to waterbased polymers.
- DECOSPHAERA® are compatible with solvent based traditional chemicals to boost the matting performance and overcoat protection of synthetic materials.
- Polymeric matting agent to improve abrasion and scratch resistance without affecting the gloss variations.
- Designed to provide a deep matt at high gloss angles.
- Specific grades made from biobased renewable raw materials.

Renewable solutions


- ROLFLEX®, VISCOLAM®, ESACOTE® are designed for new generation of performance coating fully compliant with the **Zero Discharge of Hazardous Chemicals (ZDHC)**, **Manufacturing restricted substance list (MRSL)**, **BLUESIGN® approved products**.



Esacote® for overcoat and protective

Product	Solid content	Composition	Gloss (60°)	Material			Features
				PVC	TPO	TPU	
PVC TOP/K	30%	PUD based compound	<1	x	x	x	High adhesion on PVC and TPO substrates with soft touch effect
PVC TOP/DH	30%	PUD based compound	0.8-1.2	x	x	x	Enhanced pot-life with polyisocyanates and high abrasion resistance
PVC TOP/SN	27%	PUD based compound	<1	x	x	x	Enhanced UV fastness and dry touch
PVC TOP/HA	28%	PUD based compound	<1	x	x	x	"Light compound" with better Newtonian rheology profile and ageing resistance, for higher formulation flexibility

Rolflex® for top coats formulations

Binder for top layers						
Product	Solid content	Chemistry	Properties			Other info
			König hardness(s)	F 100% (MPa)	Solvent	
ACF	35%	Polycarbonate	153	13	DMM*	High abrasion, chemical and thermal resistance
PU 148	35%	Polyether/Acrylic	108	17	DMM	High abrasion, chemical and thermal resistance
T 87	35%	Polycarbonate	35	5	DMM	High flexibility and chemical resistance
MV 24 	35%	Polyether	80	10	DMM	High abrasion resistance with good flexibility and chemical resistance
AL 62	35%	Polyester	47	7	DMM	Good abrasion and chemical resistance

Adhesion on critical substrates						
Product	Solid content	Chemistry	Properties			Other info
			König hardness(s)	F 100% (MPa)	Solvent	
T 63	35%	Polyester	27	2.5	DMM*	Outstanding adhesion on PVC and TPO


Rolflex® OP ultra low-gloss solutions

Product	Solid content	Composition	Gloss (60°)	Features
OP 997	25%	Inherently matt polycarbonate	<1	Very high abrasion resistance and UV fastness
OP 888	32%	Inherently matt polyether	<1	Soft touch effect and high flexibility
OP 80 	32%	Inherently matt polyether	<1	Soft touch effect and high transparency
OP 989	25%	Low gloss polyester	<1	Low cost matting agent with good ethanol resistance


Rolflex® for foam coating and skin layers

Product	Solid content	Chemistry	Properties			Other info
			Elongation (%)	F 100% (MPa)	Solvent	
HS 18 	60%	Polyether	500	3.5	Free	High stability with fillers and flame retardants. Very resilient foam with high hydrolysis resistance
ZB 7	50%	Polyester	800	0.5	Low VOC	High stability with fillers and flame retardants. Very soft and flexible foams
BZ 88	50%	Polyester	600	5	Low VOC	High stability with fillers and flame retardants. Better hydrolysis resistance than polyesters
FR 66	40%	Polyester	> 1000	0.2	Free	High stability with fillers and flame retardants. High softness, flexibility and bonding strength

Rolflex® for adhesive layers

Product	Solid content	Chemistry	Adhesion performance			Other info
			Wet lamination	Dry lamination	Solvent	
A 440 	40%	Polyether	15-20 N	15-20 N at 130 °C	Free	Very soft and flexible adhesive with low thermo-reactivation temperature
ADH 190	35%	Polyether	25-30 N	Not suitable	Free	Medium-soft binder with high hydrolysis resistance
K 80	35%	Polyester/Acrylic	Not suitable	20-25 N at 160 °C	Low VOC	Medium-rigid binder with high thermoreactivation temperature

Rolflex® for coagulation bases

Product	Solid content	Chemistry	Properties			Other info
			Elongation (%)	F 100% (MPa)	Solvent	
CG 60	30%	Polyether	600	1.3	DMM	Soft and flexible binder with high coagulation efficiency
CG 40	40%	Polyester	800	1.6	Low VOC	Very soft binder used alone or in blend to increase the softness of the coagulate.
CG 120 	30%	Polyether	500	1.4	DMM	Medium-soft binder with gummy touch.

Rolflex® BK & CX enhancing performance

Product	Solid content	Chemistry	Curing temperature	Other info
BK FREE	35%	DIPA- blocked isocyanate	120 °C	Blocked isocyanate free of hazardous blocking agents
CX 08	70%	Polyisocyanate in propylene-carbonate	Room temperature	Isocyanate crosslinker
CX 013	70%	Polyisocyanate in DMM	Room temperature	Isocyanate crosslinker
CX 021	50%	Carbodiimide	Room temperature	Carbodiimide crosslinker

Viscolam® rheology modifiers for high quality coating

Product	Solid content	Chemistry	Rheology profile	Other info
1020	20%	Associative polyurethane	Newtonian	Low thickening power – Solvent and VOC free
1022	25%	Associative polyurethane	Slightly pseudoplastic	Medium Thickening power – Easy-to-disperse
PS 170 AiR	46.5-50%	Associative polyurethane	Strongly pseudoplastic	High thickening power – Solvent and VOC free


Decosphæra® high performing matting agents

Product	Solid content	Chemistry	Particle size D 50 (µm)	Other info
8/20 HT	100%	Polyether	5 - 8	Reduced yellowing after high temperature treatments
8 PC	100%	Polycarbonate	5 - 8	Enhanced chemical and abrasion resistance
TR 3 EF	100%	Polyether	5 - 8	Better soft touch effect on thinner coating
Adimatt 8 FT	40%	Polyether	5 - 8	Ready-to-use dispersion

Additives for top coats

Product	Solid content	Chemistry	Other info
Coat 68	40%	Silicon emulsion	For slippery touch and abrasion resistance
Coat 304	30%	Silicon emulsion	For slippery touch and stain resistance
Coat ATS conc.	28%	Silicon-wax compound	For soil and stain resistance
Coat STS	43-46%	Silicon emulsion	For stick&slip effect (available even VOC free)

* Dipropylene glycol Dimethyl ether

 Available version based on renewable resources