Esacote® Carbocel® Spheromers®

Solutions for functional and coated paper

Barrier coating

- ESACOTE® acrylic emulsions for Oil and Grease Resistance (OGR) barriers.
- ESACOTE® acrylic emulsions with balanced performance for both oil and water hold out, with high solids content and very good heat sealability.
- ESACOTE® ethylene-acrylic polymers for outstanding water hold out and very good heat sealability.
- ESACOTE® natural polymers with outstanding features for oil hold out.
- ESACOTE® acrylic polymers with tailor-made heat sealability temperatures.
- ESACOTE® polymers engineered for speed sizer/film press application.

Security paper

- ESACOTE® solvent free polyurethane dispersions (PUD) with all the features required by very demanding security paper treatment.
- ESACOTE® BIO waterborne polyrurethane dispersions (PUD) based on renewable raw materials for enhancing security paper sustainability.
- ESACOTE® PUDs engineered to perform excellent ink adhesion, chemical and mechanical resistances. Designed to provide very good application runnability and compatible with all current security features and inks.
- ESACOTE® PUDs customized blends which deliver characteristic films in terms of elasticity, transparency and mechanical resistances.

Coated paper

- VISCOLAM® rheology modifiers (ASE and HASE) are engineered for cost effectiveness, water retention control and coating color's solids stabilization. Designed to optimize blade load control and reduce common defects such as bleeding, misting, and orange peel.
- CARBOCEL® (carboxymethyl cellulose) enhances water retention of the coating colour and acts as optical brightening agent (OBA) carrier. Based on wide capabilities of the derivatives we manufacture special grades with customised thickening efficiency.
- LAMLUX aqueous emulsion of polyoxyethylenic polymer designed to deflocculate coating pigments and increase final paper gloss and brightness.
- LAMPRINT dispersed pigment dyes with high light fastness for nuancing and tinting.
- DEFOMEX defoaming agent for coating colours and surface treatments.
- LAMKOTE dispersion of calcium stearate that performs as lubricant to reduce dusting effect at cylinders.
- REOTAN acrylic-based dispersing agent designed to deflocculate clay and calcium carbonate particles and to prepare a stable, free-flowing suspension at high solid content. Low to high molecular weight available.

Luxury paper

- ESACOTE® PUDs recommended for treating dark coloured papers for achieving a luxury and modern look with matt and transparent film features.
- ESACOTE® PUDs with tailor made level of matt, elasticity and haptic effects.
- ESACOTE® PUDs with variable gloss levels and high chemical resistance for paper and board.

Sublimation & inkjet paper

- LAMKOTE J2 treatment for natural inkjet paper which, through high cationization, enhances yield and sharpness of printing.
- LAMFIX SO natural polymer with a very high solids content in a liquid ready to use form, ideal for speed sizer and film press application.
- CELLCOATE natural polymer tailored on high yield performances in terms of runnability, fast drying and optimal ink release.
- CARBOCEL® sodium carboxymethyl cellulose based polymers with calibrated ink drying and high efficiency transfer. Synergic effect with PVA.

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information & typical value chart

Products families and main features

		Application					Chemical properties			
		Barrier coating	Coated paper	Security paper	Luxury packaging	Dye sublimation	Chemical nature	Dry content (%)	pH	Viscosity
Water based acrylic emulsions										
ESACOTE® BC 298	Self crosslinking good water hold out. Thermosealable	x					AC	40	8.0-9.0	Brookfield RVT @ 25°C, 50 rpm, mPas·s: 250 max
ESACOTE® BC 46 HP	Best performer for grease resistance	x					AC	35	6.0-8.0	Brookfield RVT @ 25°C, 50 rpm, mPa·s: 200 max
ESACOTE® BC 57	Good balance for grease and water hold out. Thermosealable	x					AC	46	7.0-8.0	Brookfield RVT @ 25 °C, 50 rpm, mPa·s: 1000 max
ESACOTE® LP 11	Best performer for water hold out and water vapour barrier thermosealable at low temp	x					AC	25,5	7.5-9.5	Brookfield RVT @ 25 °C, 100 rpm, mPa·s: 500 max
Water based polysaccaride-acrylic copolymer emulsions										
ESACOTE® BIO BC 25	Enhanced O&G resistance. 25% Bio content. Thermosealable	x					AC	41	2.0-4.0	Brookfield RVT @ 25°C, 50 rpm, mPas·s: 300 max
ESACOTE® BIO BC 50	Enhanced O&G resistance and mineral oils barrier. 50% Bio content. Thermosealable	x					AC	41	2.0-4.0	Brookfield RVT @ 25°C, 50 rpm, mPas·s: 300 max
Water based polyurethane dispersions (PUDs)										
ESACOTE® PU 128	Excellent ink adhesion, chemical/mechanical resistance. Cosolvent free			x			PE	32	7.0-9.0	Brookfield RVT @ 25°C, 50 rpm, mPa·s: 200 max
ESACOTE® PU 29 S2	VOC Free			x			PE	30	7.0-9.0	Brookfield RVT @ 25° C, 100 rpm, mPa·s: 100 max
ESACOTE® BIO 5024	48% biobased content			x			PE	35	7.5-9.5	Brookfield RVT @25°C, 100 rpm. mPa*s: 600 max
ESACOTE® PU 980	Silky touch, matt effect and high transparency				x		PE	32	7.5-9.5	Brookfield RVT @ 25°C, 50 rpm, mPa·s: 600 – 1100
ESACOTE® BIO 9001*	66 % Bio based carbon content - Matt with silky touch				x		PE	32	8.0-9.0	Brookfield RVT @ 25°C, 50 rpm, mPa·s: 600 -1000
ESACOTE® PU 960	FCMD - Ultra soft touch and matt effect				x		PE	39	7.0-9.0	Brookfield RVT @ 25°C, 50 rpm, mPa·s: 1500 mPa*s max
ESACOTE® SW 3	Touch modifier				x		SIL	35	8.0-10.0	Brookfield RVT @ 25°C, 50 rpm, mPa·s: 200 max
ESACOTE® PU 61	High gloss , high resistance. NEP free				x		PC	35	7.0-9.0	Brookfield RVT @ 25°C, 20 rpm, mPa·s: 600 max
Aqueous solution of cellulosic ether.										
ESACOTE® NT	outstanding oil hold out	x					CMC	35	7.0-9.5	Brookfield RVT @ 20°C, 20 rpm, mPa·s: 2000 – 4000
LAMFIX SO	high solid content, ready - to - use form					x	CMC	35	7.0-9.5	Brookfield RVT @ 20°C, 20 rpm, mPa·s: 2000 – 4000
Rheological modifiers										
CARBOCEL® MB 2 LB	good water retention CMC, OBA carrier		x			x	CMC	>90	6.5-9.5	4% sol. Brookfield LVT @ 25 °C, 60 rpm: 20 – 45 mPa·s
CARBOCEL® MB 5 LB	good water retention CMC, OBA carrier		x			x	CMC	>90	6.5-9.5	4% sol. Brookfield LVT @ 25 °C, 60 rpm: 45 - 80 mPa·s
CARBOCEL® MM3	good water retention CMC, OBA carrier		x			x	CMC	>92	6.0-8.5	2% sol. Brookfield LVT @ 20 °C, 60 rpm: 35 – 55 mPa·s
CARBOCEL® DP 100 N	surface treatment in combination with PVA					x	PD	NA	7.0-9.0	4% sol. Brookfield LVT @ 20 °C, 100 rpm: 350-550 mPa·s
CELLCOATE 1	Fast drying and optimal ink transfer. OBA carrier		x			x	PD	>90	7.5-11.5	4% sol. Brookfield LVT @ 25 °C, 60 rpm: 30 mPa·s max
CELLCOATE 2	Moderate drying and optimal ink transfer. OBA carrier		x			x	PD	>90	7.5-11.5	4% sol. Brookfield LVT @ 25 °C, 60 rpm: 20 - 50 mPa·s
VISCOLAM® GP 37	ASE low thickening, high water retention		x				AC	29	3.0-5.0	Brookfield RVT @ 25 °C, 50 rpm: 200 mPa·s max
VISCOLAM® GP 39	ASE medium thickening, high water retention, high Temp resistance		x				AC	29	2.0-4.0	Brookfield RVT @ 25 °C, 50 rpm: 200 mPa·s max
VISCOLAM® 635	HASE Shear thinning and superior flow, good water retention		x				AC	30	2.0-3.5	Brookfield LVT 25 °C, 60 rpm: 200 mPa*s max
VISCOLAM® GP 1	HASE high thickening and good water retention		x				AC	33	3.0-5.0	Brookfield RVT @ 25 °C, 50 rpm: 200 mPa·s max
VISCOLAM® HRV 60	HASE pseudoplastic thickening , medium water retention		x				AC	30	3.0-5.0	Brookfield RVT @ 25 °C, 50 rpm: 200 mPa·s max

* development product

Above data cannot be considered as supply specification.

AC acrylic
CMC carboxymethyl cellulose
PD polysaccharides derivative
NA not applicable

PC polycarbonate
PE polyether
PES polyester
SIL silicon modified

FCMD Food Contact Material Declaration available upon request
OBA Optical Brightening Agent