Solutions for interior/exterior wood coatings

Primers

- ESACOTE® cationic PUDs for tannin blocking.
- ESACOTE® acrylic emulsions with good sandability.

Base coats and Top coats

- ESACOTE® PUDs, acrylic emulsions, self-crosslinking acrylic emulsions, and urethane-acrylic hybrids to achieve the right mechanical and chemical resistances.
- ESACOTE® PUDs inherently matt to provide warm touch and low gloss appearance.
- ESACOTE® radiaton curable PUDs with outstanding chemical and mechanical performance.
- DECOSPHAERA®/SPHEROMERS® PU and AC beads to improve scratch and burnish resistance.
- DECOSPHAERA®/SPHEROMERS® PU and AC beads to achieve "natural" look (deep matt) and haptics.
- Bio-based ESACOTE® (glossy and self matt) and DECOSPHAERA® grades.
- ADIWAX DSP solvent PE wax preparation, for PU 2K system as matting agent and rheology modifier.

Esacote®

Water based resins for wood coating applications

information & typical value chart

Products families and main features

		Main application			Chemical properties					Film properties		
		Primer	Top coat	Natural look	Chemical nature	Solvent (%)	Solvent type	Dry content (%)	pH	MFFT (°C)	König (K) Persoz (P) hardness (sec)	Elongation at break (%)
Water based acrylic emulsions												
AC 110	Hydroxyl functional	x	x		AC	0	Solvent free	40	7.0-8.0	60	95 (K)	NA
AC 200	FCMD - Self crosslinking	x	x		AC	0	Solvent free	40	8.0-10.0	12	38 (K)	300
Water based urethane acrylic dispersions												
PU 147	Excellent film formation/hardness	x	x		PE	5	NEP	35	7.5-8.5	<0	136 (K)/254(P)	≈230
PU 148	Glossy/hard and versatile	x	x		PE	4.5	DPGDME	35	7.0-9.0	<0	93(K)/180(P)	≈230
PU 13	FCMD - Transfer coating	x	x		PE	<1	Acetone	35	8.0-10.0	0	65(K)/139(P)	≈280
UA 7023*	self crosslinking / chemical resistance		x	x	PC	0	Solvent free	35	7.0-9.0	60	140 (K)	NA
PU 2416*	Improved mech./chemical resistance		x		PC	0	Solvent free	38	7.0-9.0	45	95(K)	≈130
Water based UV/EB curable polyurethane dispersions												
LX 7100	High performance and hardness	x	x		PC	<1	MEK	38	7.0-9.5	0	150 (K)	NA
LX 7690*	High elasticity	x	x		PC	<1	MEK	38	7.0-9.5	0	70 (K)	NA
Bio based polyurethane dispersions												
BIO 4900*	62,2% Bio based carbon content		x		PES	<1	MEK	35	7.0-9.0	15	88 (K)	≈270
BIO 118	32,8% Bio based carbon content	x	x		PES	8	DPGDME	32	7.5-8.5	43	150(K)	NA
Water based INHERENTLY MATT polyurethane dispersions												
PU 940	UV resistant		x	x	PC	2	Acetal	28	7.0-9.0	0	46(K)/90(P)	NA
PU 960	FCMD - Ultra soft		x	x	PE	0	Solvent free	39	7.0-9.0	0	52(K)/101(P)	≈500
PU 980	Silky touch		x	x	PE	0	Solvent free	32	8.0-9.0	0	35(K)/65(P)	≈250
BIO 9001*	66,1 % Bio based carbon content		x	x	PE	0	Solvent free	32	8.0-9.0	0	35(K)/65(P)	≈250
Water based polyurethane dispersions												
MD 23	CATIONIC - Anti migration stain	x			PES	<1	Acetone	30	3.5-5.5	45	28(K)	≈200
PU 71	Excellent film formation/hardness		x		PC	8	NMP	35	7.0-9.0	0	130(K)/215(P)	≈200
PU 70	Excellent film formation/hardness		x		PC	8	NEP	35	7.0-9.0	0	150(K)/290(P)	≈200
UR 115	High hardness, self crosslinking	x	x		PES	8	NEP	32	7.0-8.5	0	170(K)/290(P)	NA
PU 40	Excellent overall compatibility		x		PES	<1	MEK	35	7.5-9.5	0	50(K)/75(P)	≈400
PU 41	Excellent hardness	x	x		PES	<1	MEK	35	8.0-10.0	20	130(K)/210(P)	NA
PU 77	Improved mech. / chemical resistance		x		PC	<0,5	MEK	35	7.0-9.0	35	105(K)	≈250
PU 186	Excellent flexibility		x		PE	<1	MEK	35	7.0-9.0	< 5	50 (K)	≈420
PU 6535	Easy film formation / Good mech.		x		PES/PC	<1	MEK	35	7.5-9.5	27	65(K)	360
PU 7020	Flexibility and chemical resistance		x		PC	4	DPGDME	35	7.0-9.0	<0	33(K)/56(P)	≈320
PU 173	TEA free - VOC free		x		PE	0	Solvent free	30	7.0-9.0	0	35(K)/58(P)	≈500

Crosslinkers			**Chemico-physical properties**					
CATALYST AT5/N	Extended pot life	Polyaziridine	35	DPGME	65	-	-	Water soluble
CROSSLINKER 08	NCO Content: 11% as supplied	Polyisocyanate	30	Propylene carbonate	70	-	-	Easily dispersible

Rheological modifiers			**Chemico-physical properties**					
VISCOLAM® PS 166	Low/Medium Shear HEUR	Med PVC/gloss paints	24	2 Butoxyethanol	40	5.0-7.0	-	KU builder
VISCOLAM® PS 167	Low/Medium Shear HEUR	Med PVC/gloss paints	24	Butyldiglycol	40	5.0-7.0	-	KU builder
VISCOLAM® PS 170 AIR*	Medium Shear HEUR	Med PVC/gloss paints	0	Solvent free	46,5	4.0-10.0	-	KU builder
VISCOLAM® PS 202	High Shear HEUR	Med PVC/gloss paints	0	Solvent free	20	4.0-7.0	-	ICI builder

Polymeric matting agents			**Chemico-physical properties**			
DECOSPHAERA TR 8-20	matting agent	PU beads	0	solvent free	99 ± 1	d(50) 5-8um
DECOSPHAERA BIO TR 8	matting agent	PU beads (BIO-based)	0	solvent free	99 ± 1	d(50) 5-8um
DECOSPHAERA TR 15	matting agent	PU beads	0	solvent free	99 ± 1	d(50) 11-15um
DECOSPHAERA TR 3EF	matting agent	PU beads	0	solvent free	99 ± 1	d(50) 3-5um
SPHEROMERS CA	matting agent	AC beads	0	solvent free	99 ± 1	d(50) 6um monisized
SPHEROMERS CA1	matting agent	AC beads	0	solvent free	99 ± 1	d(50) 10um monisized
SPHEROMERS CA2	matting agent	AC beads	0	solvent free	99 ± 1	d(50) 20um monisized

* development product

Above data cannot be considered as supply specification.

AC acrylic
PC polycarbonate
PE polyether
PES polyester

NA not applicable
FCMD food contact material declaration available
DPGME dipropylene glycol methyl ether
DPGDME dipropylene glycol dimethyl ether