

Solutions for waterborne inks

Binders for waterbased roto/flexo inks

- ESACOTE® PUDs, acrylic-urethane hybrids and acrylic emulsions are suitable options for flexo and rotogravure printing. They are adapted to adhere on the most commonly used substrates both porous, like paper and non-porous like BOPP, BOPET and PVC film.
- ESACOTE® PUDs for the formulation of lamination inks. Lamination can be performed via adhesive or thermally, as done for PVC flooring.
- ESACOTE® range provides good compatibility with most of the pigment dispersions tested.

Binders for waterbased Digital inks

- ESAJET PUDs, acrylic-urethane hybrids and acrylic emulsions especially designed to be easily re-dispersible and compatible with the most popular pigment paste.
- ESAJET PUDs, acrylic-urethane and acrylic emulsions can be quickly filtered through 1 μ sieve.
- ESAJET PUDs are good binders for the formulation of water-based digital inks.

Through our FLUIJET® range of polymeric hyper-dispersing agents we are able to support our customers in the preparation of inorganic and organic pigment dispersions for waterborne digital and conventional (gravure/flexo) inks.

- DECOSPHAERA®/SPHEROMERS® PU and AC beads as antiblocking additives or, at higher dosage, as texturizing additive in inks.
- ADIWAX wax emulsion for antiblocking and scratch improvement.

Esacote

Water based resins as binders for wb inks

information & typical value chart

Products families and main features

		Chemical properties					Film properties			
		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	FCMD-Hydroxyl functional	AC	0	Solvent free	40	7.0-8.0	60	95 (K)	NA	
AC 200	FCMD - Self crosslinking	AC	0	Solvent free	40	8.0-10.0	12	38 (K)	≈300	
Water based urethane acrylic dispersions										
PU 13	FCMD - Transfer coating	PE	<1	Acetone	35	8.0-10.0	~0	65(K)/139(P)	≈280	
D8	FCMD - Soft and resoluble	PES	<1	Acetone	35	7.0-9.0	~0	22(K)/44(P)	≈450	
Water based BIOBASED polyurethane dispersions										
BIO 4900*	FCMD - 62% Bio based carbon content	PES	<1	MEK	35	7.0-9.0	15	88 (K)	≈270	
Water based polyurethane dispersions										
PU 62	Improved adhesion on plastic	PES	5	DPGDME	35	7.0-9.0	~0	38(K)/57(P)	≈420	
PU 7020	Flexibility / chemical resistance	PC	4	DPGDME	35	7.0-9.0	~0	33(K)/56(P)	≈320	
PU 39	Excellent adhesion on plastic	PES	5	NEP	35	7.5-9.5	~0	38(K)/60(P)	≈500	
PU 40	Excellent overall compatibility	PES	<1	MEK	35	7.5-9.5	~0	50(K)/75(P)	≈400	
PU 4040*	FCMD - High compatibility	PES	<1	MEK	35	7.5-9.5	~0	48(K)	≈450	
PU 4045*	FCMD - Compatibility / Resolubility	PES	<0.5	MEK	35	7.0-9.5	~0	NA	≈850	
PU 470	Screen inks - water resistance	PE	4	NEP	40	7.0-9.0	~0	31(K)	≈600	
PU 472	Screen inks - water resistance	PE	4	DMM	35	7.0-9.0	~0	28(K)	≈700	
PU 77	Improved mech. / chemical resistance	PC	<0.5	MEK	35	7.0-9.0	35	105(K)	≈250	

Esajet

Water based resins as binders for wb digital inks

information & typical value chart

Water based acrylic emulsions										
AC 31	FCMD - hydroxyl functional	AC	0	Solvent free	40	7.0-8.0	60	95 (K)	NA	
Water based urethane acrylic dispersions										
PU 13	FCMD - Better mechanicals	PE	<1	Acetone	35	8.0-10.0	~0	65(K)/139(P)	≈280	
D8	FCMD - Soft and resoluble	PES	<1	Acetone	35	7.0-9.0	~0	22(K)/44(P)	NA	
Water based polyurethane dispersions										
4518*	FCMD - Improved resolubility	PES	<1	MEK	35	7.5-9.5	~0	NA	NA	

* 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

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.