TECHNICAL DATA SHEET

PureTone® FPC UV FLEXO INKS

DESCRIPTION

PureTone FPC UV flexo ink range suitable for non-direct food contact packaging applications as well as general label printing.

PROPERTIES

- ✓ High colour strength
- ✓ Excellent adhesion properties
- ✓ Printing speeds of 50-150 m/min (dependent on UV lamp power)
- ✓ Excellent shrink characteristics, more than 50% with good retained adhesion (dependent on substrate)
- ✓ Steam or hot air shrink
- ✓ Fast cure
- ✓ Excellent printability
- ✓ Formulated for non-direct food contact packaging applications

SUBSTRATES

Suitable for a wide range of coated papers, films and label stocks including:

- ✓ Coated PE, PP, PVC, PET, and OPP
- ✓ Shrink films, typically* PVC, PET, PET-G, OPS

* Due to the diverse nature of shrink films, it is essential that each grade/application is tested thoroughly prior to commercial production.

The suitability of uncoated synthetic substrates such as PP should be tested before printing. The surface tension should be 38 dyne/cm or above. Corona treatment should be considered to improve the wetting and adhesion onto the substrate.

APPLICATION

Mix well before use.

Anilox Selection:
Process: 300-500 l/cm (750-1250 lpi) volume 2-4 cm^3/m^2
Bases: 120-180 l/cm (300-450 lpi) volume 3-6 cm^3/m^2

Minimum lamp power – 160 W/cm

Fully cured UV flexo inks will obtain resistance properties 24 hours after printing and are not suitable for direct thermal overprinting. Please be aware that the over curing of a product may lead to problems with thermal transfer overprinting.

Note: The risk of migration is increased if the inks are not fully cured.

Clean equipment immediately after use.

PURETONE® FPC RANGE

PURETONE FPC HD PROCESS SET	Comments	Sales Code	BWS	Resistances‡			
				Alcohol	Acid	Grease	Alkali
Process Cyan		PT111-506	7-8	+	+	+	+
Process Magenta	Blue shade	PT111-106-1	5-6	+	(-)	+	(-)
Process Yellow	Opaque	PT111-306	4-5	+	+	+	+
Process Black	Standard	PT111-806	7-8	+	+	+	+
ISO PROCESS SET							
Process Black	ISO*	PT111-807	7-8	+	+	+	+

* Subject to the choice of anilox, plate, tape and substrate, PureTone FPC UV flexo process inks allow the printer to achieve ISO 12647-6 compliance.

PURETONE FPC MIXING BASE SCHEME	Sales Code	BWS	Resistances‡			
			Alcohol	Acid	Grease	Alkali
Extender	PT121-002-1	n/a	+	+	+	+
Rubine	PT121-102	5-6	+	(-)	+	-
HR Rhodamine	PT121-114	7-8	+	+	+	+
HR Bright Red	PT121-101	7-8	+	+	+	+
Orange	PT121-201	5	+	+	+	(-)
Yellow	PT121-304	5	+	+	+	+
Green	PT121-402	7-8	+	+	+	+
Process Blue	PT121-501	7-8	+	+	+	+
Royal Blue	PT121-502	7-8	+	+	+	+
HR Violet	PT121-604	7-8	+	+	+	+
Mixing Black	PT121-801	7-8	+	+	+	+
Mixing White	PT121-907	7-8	+	+	+	+
High Adhesion Extender	PT121-002-1	n/a	+	+	+	+

PURETONE FPC SPECIAL ADDITIONAL BASES	Sales Code	BWS	Resistances‡			
			Alcohol	Acid	Grease	Alkali
Warm Red	PT121-110	4	+	+	+	+

PURETONE FPC ADDITIONAL HIGH RESISTANCE BASES	Sales Code	BWS	Resistances‡			
			Alcohol	Acid	Grease	Alkali
HR Rubine**	PT121-108	7	+	+	+	+
HR Orange	PT121-202	7-8	+	+	+	+
HR Yellow**	PT121-302	7-8	+	+	+	+

HR = High resistance to light, weather and chemicals
** These two high resistance bases can be used as a Lightfast Process Magenta and Lightfast Process Yellow

BWS denotes full strength, lightfastness of tints will be reduced 8 = Excellent 1 = Poor

‡ denotes resistance to products listed
+ = high resistance
(-) = needs testing for suitability by customer
- = poor resistance

These resistances are tested according to:
Lightfastness: ISO 2835-1974
Alcohol Resistance: ISO 2837-1996
Acid/Grease/Alkali Resistances: ISO 2836-1999

High resistance inks are required for products exposed to high temperature in conventional and/or microwave ovens and pasteurisation/sterilisation processes. Please contact technical@pulserl.com for more information.

RESPONSIBILITY	**These products have been formulated to comply with the regulations and guidelines for non-direct food contact packaging applications. However, it is the responsibility of the seller of the finished product to ensure all members of the packaging chain comply with recommended guidelines and regulatory requirements.** **The risk of any contamination affecting food packaging applications should be assessed prior to use.** **Please contact compliance@pulserl.com for more information.**
STORAGE & HANDLING	Containers should be tightly closed immediately after use. All products, including uncontaminated press returns and unopened containers, should be stored at temperatures between 5°C and 25°C. Shelf life is 12 months from date of manufacture (as indicated on the label).
HEALTH & SAFETY	Please refer to relevant SDS for information on labelling classifications, waste product and container disposal, and personal protection measures.
AUXILIARY PRODUCTS	Cleaner: RLA350 UV Wash Reducer: FPCRLA206 Defoamer: FPCRLA219 Wax Slip Aid: FPCRLA405 **Note: The addition of auxiliary products to the FPC inks may have a negative effect on levels of migration.**
FURTHER INFORMATION	For more information, please contact your local representative.