
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 cm³/m²

Bases: 120-180 l/cm (300-450 lpi) volume 3-6 cm³/m²

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 PROCESS SERIES	Comments	Sales Code	BWS	Resistances‡			
				Alcohol	Acid	Grease	Alkali
Process Cyan	ISO*	11-503	7-8	+	+	+	+
Process Magenta	ISO*	11-103	5-6	+	(-)	+	(-)
Process Yellow	ISO*	11-303	5	+	+	+	+
Process Black	ISO*	11-804	7-8	+	+	+	+
Process Yellow	Opaque	11-304	4-5	+	+	+	+
Process Black	Standard	11-802	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	21-002	n/a	+	+	+	+
Rubine	21-102	5-6	+	(-)	+	-
HR Rhodamine	21-109	7-8	+	+	+	+
Warm Red	21-110	4	+	+	+	+
Orange	21-201	5	+	+	+	(-)
Yellow	21-304	4-5	+	+	+	+
Green	21-402	7-8	+	+	+	+
Process Blue	21-501	7-8	+	+	+	+
Royal Blue	21-502	7-8	+	+	+	+
HR Violet	21-602	7-8	+	+	+	+
Mixing Black	21-801	7-8	+	+	+	+
Mixing White	21-907	7-8	+	+	+	+

PURETONE FPC ADDITIONAL HIGH RESISTANCE BASES	Sales Code	BWS	Resistances‡			
			Alcohol	Acid	Grease	Alkali
HR Bright Red	21-101	7-8	+	+	+	+
HR Rubine**	21-108	7	+	+	+	+
HR Orange	21-202	7-8	+	+	+	+
HR Yellow**	21-302	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@pulserrl.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: FPCRLA234

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 or email technical@pulserl.com.

DISCLAIMER

The information contained in this data sheet is correct to the best of our knowledge. It is intended as a guide only for the optimum use of the named product(s) and is not intended as a warranty or as a specification. The product(s) included in this datasheet may not be suitable for use with other materials or in processes other than those specifically described. The user(s) should always make their own tests to establish that the product(s) meets their specification and complies with any appropriate guidelines or regulatory requirements.