

TECHNICAL DATA SHEET

PURETONE® UV FLEXO INKS

DESCRIPTION Universal UV flexo ink range suitable for shrink films as well as general label printing, showing excellent adhesion to a wide range of substrates.

PROPERTIES

- ✓ High colour strength
- ✓ Fast cure
- ✓ Excellent adhesion properties
- ✓ Printing speeds of up to 150 m/min (dependent on lamps)
- ✓ Resistance to chemicals - good, subject to laboratory testing
- ✓ Excellent shrink characteristics, more than 50% with good retained adhesion

Steam or hot air shrink.

No requirement for primer or protective lacquer.

Full process and mixing range available.

Unless the printed layer is a barrier to migration and there is no possibility of set off to the unprinted (food contact) surface, **this ink series is not intended for food packaging specifications.**

For applications where the material is not a barrier, or set off is possible, we recommend the use of food packaging compliant inks (see separate Product Selector/Data Sheet or contact technical@pulserl.com for further information).

SUBSTRATES Suitable for a wide range of **coated** papers and films, and label stocks such as 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 for 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.

APPLICATION **Mix well before use**

Anilox Selection:

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

Process 300-500 l/cm (750-1250 lpi) volume 2-4 cm³/m²

Minimum lamp power – 160 W/cm

Clean equipment immediately after use (RLA350 UV Wash is recommended).

Fully cured UV inks will obtain resistance properties 24 hours after printing.

RANGE

PROCESS SERIES	Comments	Sales Code	BWS	Resistances‡			
				Alcohol	Acid	Grease	Alkali
Process Dense Black	ISO Compliant	10-804	7-8	+	+	+	+
Process Cyan	ISO Compliant	10-502	7-8	+	+	+	+
Process Magenta (Blue Shade)	ISO Compliant	10-103	5-6	+	(-)	+	(-)
Process Yellow (Red Shade)	ISO Compliant	10-303	5	+	+	+	+
Process Black		10-802	7-8	+	+	+	+
Process Black		10-803	7-8	+	+	+	+
Process Cyan		10-503	7-8	+	+	+	+
Process Magenta (Yellow Shade)		10-102	5-6	+	(-)	+	(-)
Process Yellow (Green Shade)		10-302	4-5	+	+	+	+
Process Yellow (Opaque)		10-304	4-5	+	+	+	+

BASE SCHEME	Sales Code	BWS	Resistances‡			
			Alcohol	Acid	Grease	Alkali
Extender	20-001	n/a	+	+	+	+
Opaque White	20-901	7-8	+	+	+	+
HS Yellow	20-301	5	+	+	+	+
HS Orange	20-201	5	+	+	+	(-)
HS Bright Red	20-101	7-8	+	+	+	+
HS Rubine	20-102	5-6	+	(-)	+	-
HS Rhodamine §	20-103/ 20-106*	4	(-)	(-)	+	-
HS Process Blue	20-501	7-8	+	+	+	+
HS Green	20-401	7-8	+	+	+	+
HS Black	20-801	7-8	+	+	+	+

HIGH RESISTANCE BASE SCHEME	Sales Code	BWS	Resistances‡			
			Alcohol	Acid	Grease	Alkali
HS HR Yellow	20-302	7-8	+	+	+	+
HS HR Orange	20-202	7-8	+	+	+	+
HS HR Magenta	20-108	7	+	+	+	+
HS HR Rhodamine	20-104	7-8	+	+	+	+
HS HR Violet	20-602	7-8	+	+	+	+
HS HR Royal Blue	20-502	7-8	+	+	+	+

BWS Denotes full strength. Lightfastness of tints will be reduced.

8 = Excellent

1 = Poor

‡ Denotes resistance to products listed.

+ = very resistant (5)

(-) = needs testing for suitability by customer.

- = poor resistance (1)

(on a 1 to 5 scale)

* Code for export out of the UK.

These resistances are tested according to:

Lightfastness: ISO2835-1974

Alcohol Resistance:

ISO 2837-1996

Acid/Grease/Alkali Resistances:

ISO 2836-1999



PULSE Roll Label Products

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STORAGE & HANDLING

Store at temperatures between 5°C and 25°C.
Shelf life is 12 months from date of manufacture (as seen on the label).
Shelf life of HS Rhodamine § is 8 months from date of manufacture (as seen 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

Cleaners: RLA350 UV Wash, RLA351 Ethyl Acetate, RLA355 Acetone
RLA206 UV Flexo PureTone Reducer (add up to 5% as required)
RLA336 UV Silicone Slip Additive (add up to 2% as required)
RLA385 UV Wax Slip Additive (add up to 2% as required)
RLA367 UV Defoamer (Silicone-containing) (add up to 1% maximum)
RLA379 UV Defoamer (Silicone-free) (add up to 1% maximum)

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. This datasheet may not be suitable for combinations with other materials or in processes other than those specifically described. The user should always make their own tests to establish that the product(s) meets their requirements.