

UV FLEXO LUNA LIGHTFAST RANGE

Introduction

UV Flexo LUNA Lightfast range is Benzophenone, ITX, BDK and 369 free and has been developed for use on narrow and mid web UV flexo presses having been developed for optimum performance on all flexo printing units equipped with UV drying where improved dry lightfastness and chemical fastness properties are required.

This ink range has the potential for use on indirect food packaging, on the condition that Food Packaging Compliance (FPC) can be demonstrated.

This product range is manufactured using state of the art dispersion techniques and conforms to exacting quality standards.

These inks lend themselves to a wide range of applications including labels, sachets, wall coverings, swing tickets and boards.

Key Features	Advantages	Benefits
Benzophenone, ITX, BDK and 369 free	Compliant to the EuPIA Exclusion Policy	Widens portfolio of suitable work
Improved Fastness Properties	Better dry lightfastness and chemical fastness than standard inks	Potential to print wider range of labels
Optimised Viscosity and Flow	No foaming or spitting Minimal dot gain Excellent cell release Can be pumped	Runs well on press Sharper images and clearer highlights are possible Saves time
Rapid Cure Response	Press can run faster No set-off on rollers or print	Potential to save time and money Fewer quality rejections
Superior Adhesion	Use a wide range of materials	Flexibility in products you can convert
Solvent Free	Environmentally friendly Inks stay open No lamp damage	Healthy working environment Fewer wash ups - time savings Fewer lamp replacements - cost savings
Quality Assured Consistency	Product is always of the same high quality	Time savings Less ink waste
Press Ready	No press side additions to the ink	Printer friendly and no wasted time
High Gloss	Finishing varnish not often required	Potential for cost savings

Technical Information

Fastness and Product Resistance

Colour	Code	Light Fastness	Weather Fastness (100hrs)	Steam Sterilisation	Alkali	Acid	Soap	Alcohol
Process/Pantone Yellow	YF3001	6+	3	N/A	4-5	5	5	5
Orange	YF3002	5-6	2	4-5	5	5	5	5
021 Orange	YF3004	5-6	3	4	5	5	4-5	4-5
Warm Red	RF3002	6	N/A	4-5	5	5	5	5
032 Red	RF3004	6-7	5	4-5	5	5	5	5
Rubine/Magenta	RF3001	6-7	3	N/A	5	5	N/A	5
Rhodamine	RF3003	6-7	N/A	5	5	5	5	5
Purple	CF3003	6-7+	4-5	5	5	5	5	5
Violet	VF3001	6-7+	5	5	5	5	5	5
072 Blue	CF3004	6-7+	5	N/A	5	5	5	4-5
Reflex Blue	CF3002	6-7+	5	N/A	5	5	5	4-5
Blue	CF3001	6-7+	5	N/A	5	5	5	4-5
Green	GF3001	6+	N/A	N/A	5	5	N/A	5
Untoned Black	BF3002	6+	5	5	5	5	5	5

Process Standard Range

Colour	Code	Light Fastness	Weather Fastness (100hrs)	Steam Sterilisation	Alkali	Acid	Soap	Alcohol
Process Cyan	CF3005	6-7+	5	N/A	5	5	5	4-5
Process Black	BF3005	6+	5	N/A	5	5	5	2-3

Notes on Fastness Table

All figures are based on the latest available information at the time of publication. Please note for inks containing more than one pigment the lowest fastness values are quoted.

For further information on light fastness see our Knowledge Base article on "The Lightfastness of Printing Ink".

The above lightfastness figures are based on a 1-8 Blue Wool Scale for dry lightfast conditions only.

Weather fastness results are quoted for 100 hours exposure (approximately 1 month) on the following grey scale for weather fastness where 1^* = colour disappeared. For outdoor applications that may be exposed to weathering please contact Paragon for recommendations prior to printing.

Grey Scale	5	4-5	4	3-4	3	2	1
Fastness	Very Good	Good	Adequate	Fair	Poor	Very Poor	Not Acceptable

Physical Data

Curing speed	> 100mpm		
Curing type	Ultra Violet (free radio	cal)	
Typical densities (Optimised process weights at 80mpm)	Yellow 0.95 - 1.15 Cyan 1.35 - 1.45	Magenta 1.35 - 1.45 Black 1.40+	
Anilox volume recommendations (lpi/cm3/m2)	Process work	700-900 lpi / 3-4.5 cm ³ /m ²	
	Line or Type	400-650 lpi / 4-6 cm ³ /m ²	
	Solids	250-550 lpi / 5-9 cm ³ /m ²	
	Backing White	100-200 lpi / 10-20 cm ³ /m ²	
	Metallics	100-200 lpi / 8-11 cm ³ /m ²	
	Lacquering	100-300 lpi / 6-11 cm ³ /m ²	
Suitability/performance:	Excellent	Good	Testing advised
Substrates:			
Machine coated paper	•		
Top coated synthetic substrates	•		
Thermal active papers (when over lacquered)		•	•
Foils	•		
Combination Printing:			
UV Letterpress	•		
UV Flexo	•		
UV Primaflo	•		
UV Flexo / Duct Varnish	•		
Water based Flexo			•
UV Screen (silicone free)	•		•
Suitable overprint methods:			
Thermal transfer overprinting	•		•
Direct thermal (requires over lacquer)		•	•
Hot Foil	•		•
Laser overprinting	•		•

Substrates

This ink system has been purposely designed for use on the majority of papers, boards, synthetics and foils both supported and unsupported. The inks are press ready and the use of performance additives is not recommended without prior consultation or recommendation by Paragon Inks. This ink system is not suitable for thermal active papers without the use of a suitable over varnish.

NB. Due to the wide variety of synthetic substrates available we cannot provide guarantees for ink adhesion. We recommend the use of good quality top coated substrates. Non - top coated substrates can also be converted providing the material is corona treated or primed prior to printing.

It is recommended that adequate testing be carried out prior to production runs.

^{**} Always test any thermal stock prior to use for UV suitability.

Overprinting

All inks detailed in this information sheet are free from surfactants and are considered suitable for overprinting using thermal transfer ribbons, hot foils, laser toners, flexo and screen inks. Please note that due to the wide variety of ribbons, foils and toners which are available, we always recommend overprintability trials be conducted for suitability when using these products for the first time or if the print construction changes.

It is important that tests are carried out to ensure good results can be achieved when printing on press.

Other Information

All products must be mixed/stirred thoroughly to ensure consistency prior to printing, failure to do so may alter the performance or finish of the inks.

Storage & Shelf Life

All products detailed in this information sheet have a guaranteed shelf life of 12 months but storage conditions are imperative. The container should be closed immediately after use and stored in a dry area at 5-18°C away from direct sunlight. This guarantee only applies to sealed, unopened containers.

The information contained in this General Information sheet is based on the experience of Paragon Inks (Holdings) Limited and our internal laboratory test procedures. It is not to be interpreted as a warranty or guarantee in any form as conditions and variables beyond our control can affect the end result. We recommend press trials when using new substrates and other print related variables for suitability purposes. We reserve the right to alter any product data as a result of technical or manufacturing processes.

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