

# **UV FLEXO LUNA RANGE**

### Introduction

The UV Flexo LUNA range has been designed to unite the major requirements of press and print performance, colour strength, fluidity, stability, quality and value for money in today's and future markets.

The Pantone digital library is the foundation for the LUNA range, giving a greater consistency and accuracy to the bespoke mixing guide, utilising the latest technologies that allows for a perfect platform for digital colour synergy and creation.

Benzophenone, ITX, BDK and 369 free and developed for use on in-line UV flexo presses, giving optimum performance in all types of flexo printing units equipped with UV (MPM) drying.

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

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

The range lends itself to a wide range of applications including self-adhesive labels, wet glue applications, sachets, IML, PVC shrink sleeving, carton and board applications, ticket and tags.

Key Features	Advantages	Benefits
Benzophenone, ITX, BDK and 369 free	Compliant to the EuPIA Exclusion Policy	Widens portfolio of suitable work
High Colour Strength	Anilox and ink laydown flexibility	Cost savings and print optimisation
Based on the Pantone Digital Library	Colour accuracy and consistency	Cost savings and print optimisation
Low Viscosity & Fluidity	Improved print unit performance Optimised dot creation and clean print	Optimum up time and quality
Rapid & Balanced Cure Package Response	Optimum press speeds Performance from 0 to maximum speed	Consistency and stability
Superior Adhesion	Use a wide range of materials	Flexibility in products you can convert
Solvent Free	Environmentally friendly Ink stability No excessive lamp degradation	Healthy working environment Optimum up time on press UV unit integrity
Surfactant Free	No foaming or aeration Overprintable	Optimum up time on press and savings
Paragon Inks Global Guarantee	Product is always of the same high quality	Optimum up time on press and savings
Press Ready	No press side additions to the ink	Optimum up time on press
High Gloss	Aesthetic lacquer often not required	Potential for cost savings

# **Technical Information**

# **Fastness and Product Resistance**

Colour	Code	Light Fastness	Weather Fastness (100hrs)	Steam Sterilisation	Alkali	Acid	Soap	Alcohol
Yellow	YF0001	4-5	N/A	N/A	5	5	N/A	5
Orange	YF0002	4-5	N/A	N/A	4	4	N/A	N/A
021 Orange	YF0004	4-5	N/A	N/A	3	4	N/A	N/A
Warm Red	RF0002	4-5	N/A	N/A	3	4	N/A	N/A
032 Red	RF0004	4-5	N/A	N/A	3	5	N/A	3
Spot 032 Red	RF0014	3	N/A	N/A	1	4-5	N/A	N/A
Rubine	RF0001	4-5	N/A	N/A	4	2	2-3	3
Rhodamine	RF0003	5-6	N/A	N/A	4	2	2-3	3
Pink	RF0006	5-6	N/A	N/A	4	2	2-3	3
Purple	CF0003	3	N/A	N/A	4-5	5	4-5	3-4
Violet	VF0001	3	N/A	3	4-5	5	4-5	3-4
072 Blue	CF0004	5	N/A	N/A	4-5	5	4-5	3
Spot Reflex Blue	CF0002	5-6	N/A	N/A	4	2	2-3	3
Dark Blue	CF0006	4-5	N/A	N/A	4-5	5	4-5	3
Process Blue	CF0001	6+	N/A	N/A	5	5	5	3
Green	GF0001	6+	N/A	N/A	5	5	N/A	5
Intense Green	GF0011	6+	N/A	N/A	5	5	5	5
Untoned Black	BF0002	6+	N/A	N/A	4	2	2-3	3

# **Process Standard Range**

Colour	Code	Light Fastness	Weather Fastness (100hrs)	Steam Sterilisation	Alkali	Acid	Soap	Alcohol
Process Yellow	YF0005	4	N/A	N/A	5	5	N/A	4-5
Process Magenta	RF0005	4-5	N/A	N/A	4	2	2-3	3
Process Cyan	CF0005	6+	N/A	N/A	5	5	5	3
Process Black	BF0005	6+	N/A	N/A	4	2	2-3	3

# **Process Strong Range**

Colour	Code	Light Fastness	Weather Fastness (100hrs)	Steam Sterilisation	Alkali	Acid	Soap	Alcohol
Process Yellow	YF0007	4	N/A	N/A	5	5	N/A	4-5
Process Magenta	RF0007	4-5	N/A	N/A	4	2	2-3	3
Process Cyan	CF0007	6+	N/A	N/A	5	5	5	3
Process Black	BF0005	6+	N/A	N/A	4	2	2-3	3

# **Process Lite Range**

Colour	Code	Light Fastness	Weather Fastness (100hrs)	Steam Sterilisation	Alkali	Acid	Soap	Alcohol
Process Yellow	YF0015	4	N/A	N/A	5	5	N/A	4-5
Process Magenta	RF0015	5-6	1*	N/A	4	2	2-3	3
Process Cyan	CF0015	6+	5	N/A	5	5	5	3
Process Black	BF0015	6+	N/A	N/A	4	2	2-3	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  $1^* = \text{colour disappeared}$ . 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	> 100 m/min		
Curing type	Ultra Violet (free radio	cal)	
Typical densities (Optimised process weights at 150 m/min)	Yellow 0.95 - 1.15 Cyan 1.35 - 1.45	Magenta 1.35 - 1.45 Black 1.40+	
Volume recommendations (cm³/m²)	Process work	2-4 cm <sup>3</sup> /m <sup>2</sup>	
	Line or Type	4-6 cm <sup>3</sup> /m <sup>2</sup>	
	Solids	5-7 cm <sup>3</sup> /m <sup>2</sup>	
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 Primoflo	•		
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.

\*\* Always test any thermal stock prior to use for UV suitability.

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.

### **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 ink.

## **Storage and 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.

Web: www.paragoninks.co.uk • Email: info@paragoninks.co.uk

Tel: +44 (0)1506 401260 • Fax: +44 (0)1506 400009

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