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AP Scientific Ltd.

**HIGH PERFORMANCE
UV CURING PRINTING INKS**



THE "RC" - SERIES

Available as part of a wide range of products for the printing industry.

*Dr A Pagliuca
Managing Director
AP Scientific Ltd.*

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The “RC” RANGE of UV PRINTING INKS

A high quality range of UV curing inks are available for offset litho, silk-screen and gravure printing.

These are very high quality, temperature and lamination resistant low mist ink formulations – details shown below

CHARACTERISTICS

- Appearance: Viscous paste inks
- Suitable for: Plastics, with a surface tension > 38 dyne/cm. Other materials can be formulated for.
- Gloss: Good
- Rub & Scratch Resistance: Characteristic of UV materials, being excellent when thoroughly cured
- Motif: Halftone or full solid, spot colour
- Colour Stability: Specially chosen pigments to withstand the temperatures involved

APPLICATION

- Application Method: Offset lithography, print very sharply with good lithographic working properties. Also silk-screen and gravure compatible grades are available.
- Flexibility: Good
- Adhesion: Excellent
- Drying Method: Photopolymerization by UV curing

CLEANING AGENT

UV Roller Wash UV FD1

STORAGE

Away from heat, sun and frost between 5-25°C, and away from oxidising or reducing agents.

SHELF LIFE

At least 6 months from date of manufacture

PERFORMANCE

- The UV system was designed to overcome the 'bleed-edge vignette problem' for printing on plastics such as PVC commonly encountered in credit/security/smart plastic card manufacture.
- Can withstand lamination temperatures of the order 160 - 170°C at several bar pressure with a dwell time cycle of some 20 minutes, although will operate at much lower temperatures.
- We have a full range of colours with no significant colour change after heat lamination.
- Bond strengths after heat lamination using a polyurethane coated PVC film have been found to be of the order at least twice the ISO Specification at both 90° and 180° tensile testing.
- These inks have also been specially formulated for low misting.

PACKAGING

1Kg, 2.5Kg, and 10Kg plastic pots

Process Set

Process Yellow	RC464
Process Magenta	RC465
Process Cyan	RC466
Process Black	RC467

Base Colour Range

Yellow	RC 441
Orange(021)	RC 442
Warm Red	RC 443
Rubine	RC 444
Rhodamine	RC 445
Purple	RC 446
Violet	RC 447
Reflex Blue	RC 448
Process Blue	RC 449
Green	RC 450
Red (032)	RC 451
Blue (072)	RC 452
Yellow (012)	RC 453
Opaque White	RC 454
Untoned 'Mixing' Black	RC 455
Tint White	RC 456
Gold Paste (Two Pack)	RC 457
Silver Paste(Two Pack)	RC 458
Metallic Ink Varnish(Two Pack)	RC 459

All other colours including metallic ink shades and supporting varnishes and coatings available on request. Apart from the above lithographic inks, waterless and screen versions are also part of our portfolio, as are UV curing primers and UV adhesives where needed.

LIGHTFAST(Approximate) GUIDLINE RATINGS FOR THE INK SERIES.

Reference	Colour	Full	Tint
RC 441	Yellow	4-5	3-4
RC442	Orange	6-7	6
RC443	Warm Red	6-7	6
RC444	Rubine	5	4
RC445	Rhodamine	6	5-6
RC446	Purple	6-7	6
RC447	Violet	6-7	6
RC448	Reflex Blue		6
RC449	Pro Blue	7	6-7
RC450	Green	7-8	7
RC451	032 Red	6-7	6
RC452	072 Blue	6-7	6
RC453	012 Yellow	6-7	6
RC454	Opaque White	6	6
RC456	Black	7-8	7
RC457	Tint White		
RC464	Process Yellow	4-5	3-4
RC465	Process Magenta	5	4
RC466	Process Cyan	7	6-7
RC467	Process Black	7-8	7

The basic Yellow, Rubine, Process Magenta and Process Yellow can be produced in higher Lightfast quality if required. All the above figures are approximate Blue Wool scale values determined from the pigment ratings given by their raw material suppliers.

We also provide a similar range of water based and solvent based printing inks. Please ask for details.

Please Note:

Whilst the above information is given in good faith, it is recommended that all varnishes and inks are pre-tested prior to committal to a production run, to ensure that they are entirely suitable for the application in question. No warranty expressed or implied is made. The user must determine and be responsible for compatibility and performance of our products with their particular applications or processes.