



DIAMOND LM

FREE-RADICAL U.V. INK SYSTEM

(Prefix MQF)

DESCRIPTION

A more expensive system, based on photoinitiators (PI's) and acrylates which have the lowest 'migration potential' (based on optimised 'best technology' from raw material supplier's information and Mirage Inks independent migration tests).

Developed to give low migration of both **photoinitiators** and **Acrylates**.

All components are also approved by the 'Nestle Guidance Note on Packaging Ink' (2016).

The system has been developed to maintain the very high colour strength/gloss and cure performance of our standard inks.

TYPICAL PROPERTIES (FULLY CURED INK)

Low migration potential – migration levels have been independently measured & found to be below industry guidelines - see notes on next page.

100% compliance with Environmental Protection Act-VOC Free.

Fast 'cure' speed – dependant on substrate & lamp configuration.

High colour strength.

Excellent wet & dry rub resistance.

The inks in this range are suitable for overprinting.

Low odour properties.

A high gloss, resistant surface.

If the printed substrate is to be used for packaging, subsequently filled with odour sensitive contents, ensure that the typical odour of the print will not cause any adverse affect.

SUBSTRATES

The system is suitable for printing a wide range of in-line corona treated plastic substrates such as PVC, PET, OPS, papers and foils.

However, the system offers limited adhesion on polypropylene (with or without corona treatment).

Before any commercial print run, Mirage Inks Limited recommends that, new or un-proven substrates be checked for compatibility with the Diamond range.

Assess adhesion, shrink, resistance, & in-roll storage (blocking).

Mirage Ink Technical Department should be consulted before printing any unproven substrate.

REDUCERS

Normally no reducers are required and no addition should be made to the ink.

Inks are supplied press ready as a complete system.

Additions of solvent and other materials may adversely affect cure rate and should be avoided.

A colourless medium is available if a reduction in colour strength is required.

QUALITY ASSURANCE

Products with the prefix and product name specified above are Quality Controlled to Mirage Inks Test Specification No.110 as described in the test manual. Details of all tests are available on request from our technical department.

TECHNICAL DEVELOPMENT

Mirage has full control over formulation (including manufacture of all pigment concentrates). This gives flexibility to gain maximum technical performance. This in turn then gives Mirage the ability to develop bespoke inks to suit individual customer needs where practicable.

Note:

Labels/Sleeves for food applications where migration is an issue - Although the Diamond LM series has been developed using raw materials that give the lowest migration potential; the printer/converter should trial the chosen ink system. The subsequent print should then be assessed by an accredited laboratory to ensure the print complies with current legislation. This may initially involve assessing the inks performance at various press speeds to ascertain the optimum conditions for achieving low migration. This will then enable the printer to factor in a safety margin regarding press speed when printing these inks to take into account variations in process parameters. The printer/converter must also consider any different substrates/end applications & the affect this may have on migration potential.

All information contained in this data sheet is based on extensive laboratory testing at Mirage Inks. Technical performance of the inks can vary according to the conditions the product is printed under, of which we have no control over. Therefore we recommend the product be trialled fully to assess suitability for each customers application. The product should also be assessed to account for all the variables within the process, such as all different substrates used etc.

The information given is supplied as a guide only with the properties achieved under laboratory conditions. Mirage Inks Limited strongly recommends that you satisfy yourself as to the suitability of the product with trials. Please consult our laboratory to discuss any different requirement. As particular conditions of use and variations in quality of materials and substrates being used are outside our control, it is therefore not possible to guarantee the performance of our products.

Products supplied under this ink name / prefix, are best used within a six month period from the date of manufacture (as specified on the product label). In-line with Mirage Inks Ltd ISO 9001 procedures, retained batch samples for any product supplied under this ink name / prefix, are retained & stored at room temperature for a period of six months from the date of manufacture.

Should the product be used outside of this six month period, Mirage Inks Ltd. have no reference sample for comparative & test purposes, so cannot investigate or be held responsible for any print related problems.

Mirage Inks Ltd will not accept liability for any claim arising as a consequence of a laboratory colour matching being offered to our customer in good faith, and then subsequently Mirage's customer failing to obtain approval from their customer prior to printing / production.

Issue 4
30-08-19