



QUARTZ CATIONIC U.V. INK SYSTEM

DESCRIPTION

A high gloss ultra violet curing Ink System for Flexo applications that is instantly converted to

a solid using an acid catalysed process.

The MQ series should only be used in food packaging applications where the package represents a barrier to migration and a suitable assessment has been conducted.

TYPICAL
PROPERTIES*
(FULLY CURED INK)

A high gloss and resistant surface.

High solvent resistance (when fully cured).

Excellent wet & dry rub resistance.

Continues to dark cure after initial reaction.

Steam Shrinkage/ Pasteurisation resistance- (Not Metallics or Fluorescents)

*Overprinting solvent, free radical and waterbased inks can cause serious failure and so specific tests will be required to identify acceptable working parameters - refer to Mirage Technical Department.

Any inhibition of the UV cationic reaction, resulting in incomplete cure, (e.g. through environmental /substrate/processing conditions), can, in the presence of moisture, lead to the production of odorous by-products. It can also adversely affect adhesion & resistance properties.

SUBSTRATES

The system is suitable for printing a wide range of plastic substrates (OPP, Polythenes, papers and foils). However, some additives and binders can inhibit or poison the curing reaction. Mirage Inks 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. It is supplied press ready as a complete system. Additions of solvent and other materials may adversely affect cure rate and should be avoided. A medium is available if a reduction in colour strength is required.

COLOUR RANGE

Available in a wide range of bright colours that demonstrate good general light fastness properties although care should be taken to ensure that the ink being used is suitable for the end use intended as prolonged exposure to light will necessitate the selection of special pigments. A high lightfast range can be supplied on request. Colours are matched under D50 lighting.

QUALITY ASSURANCE Products with the <u>prefix and product name</u> specified above are Quality Controlled to Mirage Inks Test Specification No53 as described in the test manual. Details of all tests are available on request from our technical department.

Environmental Considerations – Please note that the cure/drying speed of this system will be adversely affected by high levels of humidity. Under high humidity, the press speed may need to be reduced, or if possible, lamp power increased to negate this affect. Contact Mirage development laboratory for more information on this aspect.

Additional Information – see Mirage document '<u>IMPORTANT ASPECTS TO CONSIDER WHEN PRINTING WITH CATIONIC UV INKS'</u> for further detail on using cationic inks.

The information given above 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. 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.