

QUARTZ ARTEMIS 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 without the generation of benzene or ITX.

Can satisfy migration issues when printed onto a range of polymer substrates intended for some food

packaging applications, including shrink sleeves around HDPE containers.

TYPICAL
PROPERTIES*

A high gloss and resistant surface.

Excellent water & dry rub resistance.

(FULLY CURED INK) Low odour properties**

Continues to dark cure after initial reaction.

Steam Shrink/ Pasteurisation resistant** - (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 Technical Department.

**NB: 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.

SUBSTRATES

The system is suitable for printing a wide range of plastic substrates (OPP, OPS, Rigid PVC, 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.

QUALITY ASSURANCE

Products with the <u>prefix and product name</u> specified are Quality Controlled are tested to Specification $N^{\circ}92$ as described in the test manual. Details of all tests are available on request.

Print for food packaging applications where migration is an issue - Although the Quartz Artemis series has been developed using raw materials that give the lowest migration potential; it's the converters responsibility to ensure, through migration tests, that any printed material used for food packaging be assessed by an accredited laboratory & meets the necessary legislation. The printer/converter must also consider any different substrates/end applications & the affect this may have on migration potential.

Print for food packaging applications where odour is an issue – From our experience in dealing with cationic UV product, odour is very subjective and can, very often be considered unacceptable. This fact supports the end user testing the product before committing to a particular cationic range of products. Mirage can, on request, initially supply samples printed on a nominated substrate to provide an indication of odour levels. It is however, the end users responsibility to ensure, through testing, that any printed material is suitable and fit for purpose.

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.

The information given above is supplied as a guide only with the properties achieved under laboratory conditions. Mirage Inks Limited strongly recommend 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's 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.