



XLSiOR Silicone Release Coatings

(Prefix XL)

FLEXO

Introduction

Mirage Inks have developed a range of UV cationic silicone release coatings. This also includes integral primer and ink formulations which are suitable for use with these silicones. The principle objective for these developments was the in-line/on-press manufacture of self adhesive labels and tapes – including linerless labels.

Typical Properties

XLSiOR Silicone Release Coatings and combinations with primer and ink can be applied by a flexo print unit. Ideally the silicone should be applied by an EDPM rubber covered roller of 50-55 shore hardness, or suitable flexo plate. All rubber covered rollers used in the system must be dedicated to the application of UV cationic coatings and not contaminated with varnishes and inks of free radical chemistry. Also ensuring that the complete printing unit has been thoroughly cleaned. Mirage Quartz UV curable flexo inks are particularly compatible with XLSiOR silicones and give a trouble free ink/silicone combination.

Coating Weight

Optimum technical/economic performance of release coatings requires that the silicone coating weight is closely controlled. Some substrates and associated coating weights can be suggested:-

Glassine calendered krafts	1.0-1.3 gsm	PE Coated Papers	0.8-1.2gsm
Super calendered krafts	1.5-2.0 gsm	Clay Coated Papers	1.2-1.5gsm
Unsupported films	0.8-1.0 gsm		

Substrates

It is essential to ensure that the substrate is suitable for coating with XLSiOR silicones. Best results will be obtained by using liner paper/ films specifically designed for silicone coating. Having a smooth surface, low-noporosity and a chemistry that is suitable for cationic curing.

The ability to manufacture self-adhesive products on-press often gives the opportunity for using alternative liner substrates. However, these may not have the ideal surface properties mentioned above. To offset the effects of absorption Mirage have developed a clear cationic primer for application before applying the silicone.

Quality Assurance

Products with the prefix and product name specified above are Quality Controlled to Mirage Inks Test Specification No. 95 as described in the test manual. Details of all tests are available on request from our technical department. The information given above is supplied as a guide only and the properties achieved under laboratory conditions. We 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 is outside our control, it is not possible to guarantee the performance of our products.

Shelf Life

The XLSiOR products have a shelf life of **3 months** when stored in cool conditions away from sunlight in the original unopened cans.

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 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.