

PRODUCT DATA



AQUAMAIL

FLEXO

(Prefix MAE)

DESCRIPTION:

The Aquamail system has been developed to meet the needs of envelope printers. It is a water based alternative to the traditional solvent based dye inks.

TYPICAL PROPERTIES:

Very clean working
Fast setting into absorbent substrates
High colour strengths
More lightfast than dye system
Very low foaming
Non flammable

REDUCERS AND WASH UP:

Water is the only solvent required for reduction to working viscosity. Normal wash up is achieved using water but we can supply a special solution.

SUBSTRATES:

Aquamail is designed specifically for absorbent papers.

COLOUR RANGE:

It is available in a wide range of bright colours that demonstrate good lightfastness properties. We can supply a base range for blending to specific colour values.

Colours are matched in daylight/ under daylight tubes unless specified with order.

QUALITY ASSURANCE

Products with the prefix and product name specified above are Quality Controlled to Mirage Inks Test Specification No 48 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 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.

AQUAMAIL INK - USER GUIDE

- Ensure ink unit is completely clean and there is no contamination from 'spirit' based inks. This includes all pipework and anilox rolls.
(The two ink systems are incompatible and do not mix).
- Mix 3 parts 'Aquamail' ink to 1 part of water. This should produce the desired running viscosity of between 17 & 21 seconds Zahn 2.
- Fill ink pump with reduced ink (as stated above).
- Start press and get up to speed before putting ink unit on impression - this will reduce the chance of a paper jam. (Large coverage only).
- Take first print and assess colour for shade / strength.
- Take print unit off impression before stopping machine to reduce paper jam. (Large coverage only).
- If the colour is correct and matches the required pantone shade or pattern commence print run.
- If colour is too strong then reduce with a further half part water provided the viscosity is at the top of the range. Once the viscosity limit of 17 seconds Zahn 2 has been reached do not reduce back with further water. If the colour is still too strong reduce the ink back with Aquamail Medium.
- If colour is too weak, check that the anilox is of the correct specification and has been properly cleaned. If the colour is still too weak add a further half part ink - continue until viscosity limits are reached. If at this point the colour is still too weak then a stronger version needs to be dispensed.
- Once colour is correct make a note of the additions necessary to achieve the correct colour so that when the design is run subsequently the make ready time will be reduced.
- If medium has been added to significantly alter the formulation this can be adjusted on the dispenser computer so that the next time the formulation is dispensed it will be of the correct strength.

Trouble Shooting Guide

Curling

Due to the nature of water based inks they can cause paper curl as the ink dries when used to print heavy solids such as 100% opaques on the inside of the envelope. This then leads to problems with paper feed down line of the print unit.

This is exaggerated if the paper used to print the job is damp - ensure it is conditioned in the factory before use.

On reel fed envelope machines such as the W&D 102 & 202 the paper jams associated with curl can be vastly reduced by leaving the print unit off while starting & stopping the machine.

Ink weight also needs to be as low as possible so use as fine an anilox as possible to achieve the required ink density.

Print set-up is important - do not over impress the ink unit & flood the paper with ink.

Ensure that the paper feed rollers throughout the machine are operating correctly, e.g. all the suction holes are unblocked.

If curl is still causing a problem after the machine set-up has been checked then add upto 200g of **AX313** anticurl additive to 10kg of ink. (This should be used as a last resort as over addition will soften the paper and cause other conversion problems associated with damp paper).

Stripey Print

Usually caused by the ink being over reduced with water. To correct, add neat ink to raise the viscosity.

The ink formulation maybe too strong; resulting in over reduction to match the correct shade. If this is the case dispense weaker ink.

Foaming

Over a long print run the Aquamail ink may foam in the pump. Mirage supply two defoamers coded **AX52207 & UX33388** to eliminate this. AX52207 is slightly less 'active' than the UX33388, so should be the first choice as it is easier to incorporate. This is to be used at the maximum addition level of 100g in 10kg of ink.

Stabiliser

When small detailed designs are printed there is very little ink usage. Therefore the small amount of volatile amine in the ink is lost.

If the print is seen to be deteriorating it is recommended that Mirage stabiliser **AX319** be added at the addition level of 200g to 10kg of ink at the maximum rate of once every four hours.

Dirty Print

If dirty working occurs during a print run, stop the press and clean the stereotypes.

To avoid contamination of the ink with the detergent based cleaning solution (used to clean the print units at the end of the run), use stabiliser **AX319** on a lint free cloth to wipe the stereotypes.

This will act as a very effective cleaning solution and will not cause problems with contamination.

Rub Problems

If rub problems are encountered with strong colours 2% of wax concentrate **MAX355** can be added to the ink.

Cleaning Guide

Mirage recommends **AX381** for general cleaning.

This is used at 1 to 10 with water to produce a cleaning solution.

To clean the unit firstly drain all the ink and retain for future work.

Then pump the cleaning solution described above around the print unit. Do not allow ink washings to return to the ink.

Keep the 'dirty' cleaning solution separate for approved disposal by the local authorities.

On completion of a print run thoroughly clean the anilox immediately with the cleaning solution before storage.

Also follow the specialist advice from any on-site anilox cleaning machines for periodic cleaning.