AQS 8500

Type
Air-drying, water-based paper ink with a semi-satin gloss finish. Suitable for manual or machine printing. Well-suited to use in places where strong smells are a problem because of its faint odour.

Application
Can be used on many types of paper, starting from 130 g/m², and cardboard. Also suitable for printing on wood. Best results will be achieved on coated materials.

General
This water-based ink is characterised by its only faint odor, due to the just small amount of solvent it contains. Its composition makes for a stable, self-soluble ink that is rub- and water resistant.

Dying
The AQS inks dry by evaporation and polymerisation. Therefore, it is important to take humidity and temperature into account when printing. A low air humidity combined with a high surrounding temperature can cause the water in the ink to evaporate quickly, which may result in ink that is dry and polymerised too early. This can be resolved by floodcoating a thicker layer of ink or adding water or retarder if necessary.

When air or tunnel dried, the drying time is dependent on the temperature, fineness of the gauze, type of thinner, qualities of the material to be printed etc. The optimum proportion of temperature-conveyor belt speed in the tunnel must be found through experience. A guideline is: 10-20 seconds in a drying tunnel with well-functioning air circulation and cooling sections at 40-50 C°. When printing multiple layers or printing double-sided, depending on the amount of absorption, keep the prints in the tunnel twice as long to prevent prints from sticking to each other. The AQS inks are air/hand dry after 10-15 minutes.

Gloss and opacity
All colors have a beautiful satin gloss, depending on the amount of absorption. The opacity ofis highly dependent on the color of the ink and the mesh that is used.

Color mixing
All colors can be mixed to make colors from systems such as Pantone, HKS or RAL, using 120-34 T mesh and a white substrate. Other types of mesh can be used, however using coarser mesh may cause problems regarding absorption of water when the paper does not lay completely flat.

Ink usage
When using ink with 10% water or retarder, using 100-40 - 140-34 T mesh: around 45-65 m²/L. Dependent on the absorbant qualities of the printed material.

Thinners
Before adding a thinner, stir the ink well. The AQS 8500 inks can be thinned using 15% water. When working in low humidity or high surrounding temperatures and printing fine details, 5-15% AQS 8557 Slow Reducer can be added. Stability can be increased by dampening the mesh with a wet cloth.

Extension
AQS 8550 base tix can be added in every proportion to lower color intensity. This will negatively affect the light fastness of the ink, depending on the percentage added.

Halftone printing
For printing in halftone, AQS 8551 yellow tix, AQS 8552 cyan tix, AQS 8553 magenta tix and AQS 8554 black tix are available. 5-30% AQS 8550 base tix can be added to lower color intensity.

Pot life
1 year

Mesh and films
Best results will be achieved using 120/34 -140/34 T mesh. Best choice of mesh is dependent on amount of absorption, desired opacity and fineness of details. All direct film emulsions that are water resistant can be used, such as the Epta's Universal Plus.

Attention
When gluing materials with AQS 8500 ink, pH cannot be higher than 8. Otherwise, colors might dissolve and bleed.

Ink that has thickened on the screen should not be mixed with fresh ink, since the ink will not dissolve and the mesh might become clogged.

Mesh cleaning
After use, immediately rinse with water or a mixture of water and ammonia. If necessary, use Screenwash LOD.

Test printing
Please, continually make test prints before moving on to printing the complete order.

This technical information is meant to be a guideline. Even though the information is given after detailed examination and to the best of our knowledge, AGA Color Solutions Europe b.v. can take no responsibility for it.

AQS 8500

- 01 White L, EO, SO
- 02 Black M
- 04 Primrose Yellow (± pms 101C)
- 28 Chrome Yellow (± pms 7548C)
- 07 Bright Orange (± pms1655C)
- 08 Fire Red (± pms 485C)
- 09 Geranium (± pms7621C)
- 10 Bright Red (± pms 2035C)
- 11 Bright Cerise (± pms 238C)
- 12 Violet (± pms 2685C)
- 13 Paris Green (± pms 2420C)
- 14 Dark Green (± pms 3308C)
- 15 Sky Blue (± pms 2195C)
- 16 Magenta (± pms2612C)
- 18 Medium Green (± pms 7726C)
- 19 Medium blue ± pms 2756C)
- 20 Crimson (± pms 202C)
- 22 Brilliant Blue (± pms 2738C)
- 23 Mono Blue (± pms 2194C)
- 27 Blue (± pms 301C)
- 29 Azure Blue (± pms2388C)
- 33 Super Orange (± pms2018)
- 34 Orange Red (± pms Bright red C)
- 35 Fashion Pink (±pms 674C)
- 37 Carnaby Violet (± pms2627C)
- 38 Brilliant Green (± pms 340C)
- 39 Spring Green (± pms 2270C)
- 41 Pale Red (± pms185C)
- 43 French Blue (± pms 2145C)
- 88 Ultra blue (± pms 2728C)
- A Lemon Yellow (± pms 012C)
- B Golden Yellow (± pms 7548C)
- C Orange (± pms 021C)
- D Red (± pms199C)
- E Carmine (± pms 200C)
- F Pink (± pms 214C)
- G Bright Violet (± pms 274C)
- H Permanent Blue (± pms2945C)
- K permanent Green (± pms2245C)
- 51 Yellow Tix (pms Process Yellow)
- 52 Cyan Tix (pms Process Cyan)
- 53 Magenta Tix (pms Process Magenta)
- 54 Black Tix (pms Process Black)
- 55 Rubine Red Tix (± pms Rubine Red C)
- 46-1 Pale Gold (± pms 871)
- 46-2 Rich Gold (± pms 10125C)
- 47 Silver (± pms 877C)
- Sparkling Silver (geen pms referentie)
- Pearl Base (± pms 10101C)
- Bronze paste (± pms 873C)
- 45 Clear Flat (Mat)
- 49 Clear
- 50 Base Tix
- Obliterating Grey (Tussendrukgrijs)
- 05 Blackboard Black
- Fluor Orange
- Fluor Blue
- Fluor Pink

The PMS references are an approximation when printed using 120T mesh. Type of mesh, degree of dilution and type of light can affect the results.