

Passad AQ 051 Series**SunPromo® Graphic Screen
Printing Inks****1. Description**

Passad AQ 051 series waterbased screen inks are ideal for printing on paper, corrugated board, cardboard and under certain conditions pre-treated polyethylene and polypropylene. Rapid drying, ease of use, low odour and good coverage make these inks particularly suitable for printing corrugated board.

2. Product Features*

- Low odour waterbased inks
- Wide ranging adhesion to paper, board and some plastics
- Rapid drying
- Easy to use
- High coverage

*Specific application performance data, where available can be provided by your Sun Chemical representative.

3. Product Suitability***3.1 Applications**

Passad AQ 051 series inks are ideally suited for use in general graphic screen printing applications such as point of purchase and advertising and are particularly suited for printing corrugated board.

3.2 Substrates

Passad AQ 051 series inks are suitable for paper, board, corrugated board and under certain conditions pre-treated polyethylene and polypropylene. Additionally Passad AQ 051 series inks can exhibit adhesion to PET-G, Polystyrene, ABS, wood, aluminium and concrete.

If any doubt exists regarding suitability of application or adhesion of Passad AQ 051 series inks to any unusual stock, a test print is recommended. Your nearest Sun Chemical branch or distributor will be pleased to offer advice and technical assistance.

3.3 Exterior Durability

Passad AQ 051 colours have a minimum light-fastness of Blue Wool 6, well beyond the needs of normal internal display applications. Passad AQ 051 series inks are water resistant and to a degree are outdoor durable, but for short term use only.

3.4 Flexibility

Passad AQ 051 series inks will meet the rigorous demands of the display market for flexibility. On suitable materials several layers of Passad AQ 051 series inks can be die cut or folded without cracking or flaking. The use of a sharp cutting blade is essential.

*Please refer to your local Sun Chemical representative for specific details.



4. Product Range

Passad AQ 051 Inks			
Yellow	051-20000	Black	051-70000
Warm Red	051-30000	Purple	051-80000
Rubine Red	051-30100	Violet	051-80100
Rhodamine Red	051-30600	White	051-90000
Reflex Blue	051-40000	Silver	051-99103
Blue	051-40100	Gold	051-99102
Green	051-50000	Lacquer	051-00722
Passad AQ 051 Reducers, Additives and Washing Agent			
Thinner	Water	Hardener	6512103:WCR PLUS
Retarder	RP3210353:GLYCERINE BP (GLYCEROL)	Washing Up Agent	SCN2201:SOLARCLEAN WB WASH

4.1 Colour Range

Passad AQ 051 series inks are available in a range of 9 standard strong opaque shades plus black and white, which together can be mixed to match almost any colour. Pantone®* formulations are available on request.

* Pantone Inc.'s check standard trademark for colour

4.2 Metallics

Passad AQ 051 series features two metallic inks as standard, a silver and a gold. These inks may require special handling and storage, please refer to the Sun Chemical publication - 'Waterbased Aluminum Inks Handling Guide' for more information.

5. General Handling

5.1 Storage and Shelf Life

Passad AQ 051 series inks should be stored in sealed polythene containers at temperatures between 5-30°C. Passad AQ 051 series standard products, excluding metallic shades, when stored appropriately will have a minimum shelf life of 12 months but can remain useable for longer periods depending on storage conditions.

Passad AQ 051 series metallic inks have a shelf life of 90 days from date of manufacture. For more specific advice on storage and handling of waterbased metallic inks, please refer to the Chemical publication - 'Waterbased Aluminum Inks Handling Guide'.

For more specific handling advice refer to the Safety Data Sheet.

6. Printing Conditions*

6.1 Viscosity reduction

Passad AQ 051 series inks are supplied ready for use and thinning is not usually recommended, but if it is considered essential, use water or retarder at up to 10% to thin the inks. If using retarder be sure to check the prints are fully dried and not susceptible to blocking in the stack.

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6.2 Screen Stability

Passad AQ 051 series inks are very screen stable, however to avoid the inks drying in during temporary printing breaks, fill the screen with ink as a flood coat during the break. For longer planned breaks, coat the mesh in a mixture of water and pine soap (5:1 mix) to maintain an open mesh.

6.3 Drying

Passad AQ 051 series inks offer an excellent balance of screen stability with rapid drying and can be jet dried at temperatures of only 35°C, however for fast printing presses, multi-layer and / or double sided prints, a temperature of 50°C is recommended.

Passad AQ 051 series inks can be hardened if better chemical resistance and adhesion is required by using the Hardener 6512103:WCR PLUS at 1%. This hardener addition gives excellent water resistance in outdoor advertising applications when printing on polypropylene.

6.4 Printing Materials

Passad AQ 051 series inks are waterbased and therefore a water resistant stencil is essential. High quality stencil materials such as those in the SunCoat range are recommended for best results. Product Data Sheets and detailed specialist advice on choice of emulsions, films and all related stencil products can be obtained from your local Sun Chemical branch.

Fine polyester mesh with a mesh count of 120 – 140 threads/cm and a medium/hard sharp polyurethane squeegee should be used.

6.5 Coverage

Up to 50 m²/kg may be expected when using a 120 threads/cm mesh, but coverage is dependent on a number of printing factors including, mesh choice, stencil thickness, ink reduction, squeegee, etc.

6.6 Washing Up

The screen should be washed out as soon as possible after printing especially if hardener is used. A mixture of 50% soap and 50% water is very efficient or you can use the washing agent SCN2201:SOLARCLEAN WB WASH GR20-LF.

*Please refer to your local Sun Chemical representative for specific details.

7. End-use safety

7.1 Handling

Passad AQ 051 series inks should be used in accordance with normal standards of industrial hygiene. Please refer to the information provided on product labels and relevant Safety Data Sheets.

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7.2 EN71-3:2013 Safety of Toys – Migration of certain elements

These inks have been formulated to comply with the requirements of toy standard, EN 71-3:2013 Safety of toys – Migration of certain elements (category III: scraped off material). However, inks are supplied without warranty due to risk of contamination throughout the many processing steps from raw materials to finished toy. To ensure conformity, analysis, is therefore essential (note that the legislative limits apply to the toy itself and not to the wet ink as supplied). Please refer to our company statement concerning inks for toys. For further compliance confirmation and advice please refer to your local Sun Chemical branch.

7.3 Food Contact

Sun Chemical cannot guarantee the suitability of any of its screen ink products for use where direct or indirect food contact may occur.

7.4 Biocides

Water-based products typically contain isothiazolinone biocides, including methyl isothiazolinone, as in-can preservatives. Such biocides may cause allergic skin reactions in already sensitized individuals.

8. Technical Assistance / Contacts

For further information, please contact your local Sun Chemical team.

Our Products are intended for sale to professional users. The information herein is general information designed to assist customers in determining the suitability of our products for their applications. All recommendations are made without guarantee, since the application and conditions of use are beyond our control. We recommend that customers satisfy themselves that each product meets their requirements in all respects before commencing a print run. There is no implied warranty of merchantability or fitness for purpose of the product or products described herein. In no event shall Sun Chemical be liable for damages of any nature arising out of the use or reliance upon this information. Modifications of the product for reasons of improvements might be made without further notice.

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