

# Screen

## Product Data Sheet

### VYNAMATT PM SERIES SCREEN INKS

Vynamatt inks for screen printing on rigid and flexible PVC sheet combine excellent adhesion and low odour with high opacity. Typical uses of Vynamatt are for printing banners and window stickers.

**RAPID DRYING:** An important property of Vynamatt inks is the ultra-fast drying ideally suited to jet dryers. Vynamatt also gives excellent results when rack air drying is required.

**LOW ODOUR:** Vynamatt inks are based on low odour solvents for a more pleasant working environment and low odour prints.

**COLOUR RANGE:** The Vynamatt colour range consists of 9 bright, lead free, Sunmatch mono-pigmented mixing shades which when used with black, white and extender base can be readily mixed to produce almost any colour. 16 standard opaque shades are also available and are listed in the table overleaf.

**PANTONE®:** Validated formulations for all the colours in the Pantone® colour guide are available in either formulation book or computer software format. Please contact your local branch or sales representative for a copy.

**FLUORESCENT COLOURS:** Should fluorescent inks be required, Screenglo PVC inks are recommended.

**PRINTING MATERIALS:** High quality stencil materials such as Suncoat will enhance the print quality normally expected from Vynamatt PM series screen inks. Print quality is dependent on the stencil and detailed instructions for all Suncoat products are available in the form of Product Data Sheets from your local branch or distributor. Specialist advice is also available.

Fine synthetic mesh such as Sefar should be used. A mesh count between 90-120 threads/cm will facilitate optimum drying, flexibility and adhesion.

It is particularly important, when using Vynamatt opaque and Extra Opaque Whites (PM-W50 and PM-W70) to ensure that the recommended mesh is used since heavy deposits of these inks will cause a loss of flexibility.

**DRYING AND INK ADJUSTMENT:** Vynamatt inks offer an excellent balance of screen stability with rapid drying. A comprehensive range of solvent blends is available to the printer for adjusting ink drying speeds to meet any conditions.

15% Thinner TS13 is suitable to adjust the ink to printing viscosity for most normal conditions. Fast Thinner TS12 should be used for extra fast drying and Slow Retarder TS17 when exceptionally good screen stability is required. Fast Thinner TS12 is also useful to give extra 'bite' to difficult grades of PVC when adhesion is a problem.

Racked prints will dry in 10-15 minutes depending on shop conditions. Rapid drying can be achieved using jet dryers.

**WASHING UP:** Suncoat General Purpose Screenwash YC26-054 is recommended for best results.

**COVERAGE:** Mileage is dependent on a number of factors including mesh count and degree of thinning, however, as a guide, up to 50m<sup>2</sup>/kg may be expected.

**PLASTICISER MIGRATION:** PVC is often modified by incorporating a number of additives which are intended to give different, specific properties. On occasions, some of these additives may migrate to the surface of the PVC and alter the characteristics of the ink/substrate interface giving rise to adhesion problems or surface softening. It is therefore strongly recommended that new or untried grades of PVC should be tested for adhesion and blocking before a full production run.

**OVERPRINTING:** Vynamatt inks can be overprinted with Vynaglaze or Flexijet inks. The converse, however is not recommended, i.e. Vynamatt should not be printed over Vynaglaze or Flexijet.

**DURABILITY:** Standard Vynamatt shades have been tested in accordance with BS4781 – Specification of Self-Adhesive Plastics Labels for Permanent Use, parts 1 and 2 – and exceed the requirements for colour fastness and permanence of legend. All pigments have been selected to have a rating of 7-8 on the Blue Wool scale. In addition, accelerated weathering tests carried out in accordance with BS3900 Part F3 indicated an expected outdoor life of up to three years.

Accelerated weathering tests simulate exposure in a mid European climate.

**STORAGE :** Vynamatt inks should be stored in sealed metal containers at temperatures between 5 and 30 ° C. Under these conditions standard products, excluding metallic shades should remain useable for a period of 2 years.

**SAFETY AND HANDLING:** Before handling these products it is important to refer to the relevant Material Data Sheets (MSDS) which will have been provided by your local branch or distributor.

Vynamatt Inks PD 12.5.085

TS12 PD 12.5.114

TS13 PD 12.5.115

TS17 PD 12.5.120

Sun Chemical Screen strongly recommends the use of appropriate protective clothing such as gloves and goggles, when handling these products

**CHILDRENS TOYS AND FOOD CONTACT:** Sun Chemical Screen cannot guarantee the suitability of any of its products for use on printed items to be used by children (EN71), or for direct/ indirect food contact applications. Whilst Vynamatt inks are formulated to be compliant with EN71, batches are not routinely tested.

For further information regarding these issues please refer to the appropriate customer information sheets available from your local Sun Chemical Screen branch.



<b>VYNAMATT SUNMATCH COLOUR RANGE</b>			
Primrose	PM-Y30	Golden Yellow	PM-Y50
Orange	PM-O50	Scarlet	PM-R20
Red	PM-R50	Magenta	PM-M50
Violet	PM-V50	Blue	PM-B50
Green	PM-G50	Black	PM-N50
White	PM-W50	Extender Base	PM-E50

<b>STANDARD COLOUR RANGE</b>			
Yellow	PM-Y31	Mid Yellow	PM-Y41
Golden Yellow	PM-Y51	Orange	PM-O51
Warm Red	PM-R11	Scarlet	PM-R21
Red	PM-R50	Rubine Red	PM-M11
Magenta	PM-M51	Rhodamine Red	PM-M61
Purple	PM-M91	Violet	PM-V31
Reflex Blue	PM-B31	Blue	PM-B51
Process Blue	PM-B61		
Green	PM-G51		
<b>OTHER STANDARD PRODUCTS</b>			
Non-Arcing Black	PM-N60	Obliterating Grey	PM-OBG
Silver	PM-SIL1	Opaque Backing White	PM-W70
Gold	PM-GLD1	O/Print Varnish	PM-C50

<b>PROCESS COLOURS</b>			
Process Yellow	PM-0014	Process Magenta	PM-0042
Process Cyan	PM-0053	Process Black	PM-0077

<b>THINNERS AND RETARDERS</b>			
Fast Thinner	TS12	Thinner	TS13
Slow Retarder	TS17		

For Fluorescent colours please see Screenglo-PVC DGV series inks.

*This information has been carefully compiled from experience gained in the laboratory and under commercial conditions. However, the product's performance and its suitability for the customer's purpose depend on the particular conditions of use and the material being printed. We recommend that customers satisfy themselves that each product meets their requirements in all respects before commencing a print run. Since we cannot anticipate or control the conditions under which our products are used it is not possible to guarantee their performance. All sales are subject to our standard terms and conditions of sale.*

*We would point out that the information contained in this leaflet is only a recommendation and may need to be altered to suit the conditions and efficiency of the equipment employed. SunChemical Screen products are not designed for use in conjunction with those of any other ink maker or similar supplier unless agreed in writing. PDS No. 231. July 2007*

**SUN CHEMICAL SCREEN**  
**NORTON HILL, MIDSOMER NORTON, BATH BA3 4RT TEL: 01761 414471 FAX: 01761 416609**  
**www.sunchemical.com**