

# **COLORMATCH** Pigments

COLORMATCH Standard and FL Pigments COLORMATCH ME Metal Bronze Pigments COLORMATCH GLF Glitter COLORMATCH PH 451 Luminescent Pigment COLORMATCH SLV Colours for Solvent Systems

| Characterization   | Concentrated colour pigment pastes for colouring water-based screen<br>printing pastes and adhesive dispersions; metal bronze pastes,<br>coloured glitter types and afterglowing luminescent pigment powder for<br>screen printing pastes based on water and plastisol.<br>COLORMATCH SLV colour pigment pastes for printing colours<br>containing solvents and for adhesive systems.   |   |
|--------------------|---|---|
| Chemical Structure | COLORMATCH Standard/<br>COLORMATCH FL fluoro colours:   | suspended, lead-free pigments   |
|                    | COLORMATCH ME types:  | dustfree metal bronze pastes  |
|                    | COLORMATCH GLF types:   | colour-metallized, finest foil lamina based on PES                          |
|                    | COLORMATCH PH 451:  | fine powder based on metallic salt, non-radioactive                         |
|                    | COLORMATCH SLV colours:   | colour pigments pastes containing solvents                                  |
| Supplied Form      | Low to medium viscous colour pastes presently available in 19 standard shades, 6 fluoro colours (see shade card) and black and white COLORMATCH SLV colour pastes.  |   |
|                    | Metal bronze pastes in gold, coppe<br>in gold and silver, luminescent pign  | er and silver, coloured glitter powder<br>nent as fine yellow-green powder. |
| Storage            | On proper storage in a cool place, between +5 °C and +25 °C in closed original containers the products are stable for at least 6 months. In general, we recommend to shake or stir the suspensions well before use or on prolonged storage times (COLORMATCH standard pigments monthly, COLORMATCH FL fluoro colours every two weeks). The containers of liquid and pasty colour pigments as well as those of pasted up metal powders must be airtightly closed after each use. |   |

The above given values are product describing data. Please consult the 'delivery specification' for binding product specifications. Further data about product properties, toxicological, ecological data as well as data relevant to safety can be found in the safety data sheet.



# Properties

### **COLORMATCH Standard Pigments/ COLORMATCH FL Fluoro colours**

COLORMATCH colour pigment pastes are suitable for colouring transparent or already pigmented aqueous screen printing pastes and adhesive dispersions.

At low application concentrations (up to 6 % in transparent pastes for light-coloured substrates) the standard colours already produce a good colour depth and can therefore be economically applied. For high-covering multicoloured prints on dark substrates (PRINTPERFEKT LAC 60, PRINTPERFEKT LAC 110 NEW etc.) the colours must be used in up to double concentrations for achieving similarly intense shades.

With COLORMATCH FL fluoro colours the concentrations are generally in the range of 5 - 20 %.

COLORMATCH colour pigments facilitate a nearly unlimited number of shades at a minimum storage space and are suitable for the direct printing on textiles, for aqueous transfer systems and for colouring flock adhesive dispersions.

COLORMATCH standard and fluoro colours are free from lead and heavy metal.

The colour pigments

| COLORMATCH 106 YELLOW  | (2.5 %) |
|------------------------|---------|
| COLORMATCH 250 FUCHSIA | (2.0 %) |
| COLORMATCH 300 BLUE    | (0.5 %) |
| COLORMATCH 700 BLACK   | (2.5 %) |

are additionally suitable for producing Euro shades with four-colour screen printing.

COLORMATCH standard pigments all have a high fastness to light (grade 6 - 7) and a high fastness to migration (grade 4 - 5). The fastness to light of COLORMATCH FL colours reach grades between 2 and 3.

#### COLORMATCH GLF Glitter

COLORMATCH GLF glitter powders are applied for colouring transparent screen printing pastes on aqueous or plastisol base. Best glitter effects with a good fastness level can be achieved in combination with our very transparent and very fast special products.

In general, the application concentrations are in the range of 12 - 20 % for intense glitter effects, slight sparkling can already be achieved with amounts of 1 - 5 %.

COLORMATCH GLF glitter types are generally stable to temperatures of up to 180 °C. We basically recommend to carry out pretrials with higher fixing or contact temperatures. Temperatures exceeding the recommended temperature or longer reaction times in the temperature range may cause a loss in lustre or colour changes.

#### **COLORMATCH ME Metal Bronze Pigments**

COLORMATCH ME metal bronze pigments can be applied analogously to COLORMATCH GLF glitter types in transparent screen printing pastes on aqueous or plastisol base.

The application amounts are in general 12 - 20 % for COLORMATCH ME 112 GOLD or COLORMATCH ME 182 BRONZE and between 10 and 15 % for COLORMATCH ME 802 SILVER.



COLORMATCH ME metal bronze pigments facilitate direct and transfer print effects with high metal lustre and good fastness levels. On application in the basic pastes that we recommend, the COLORMATCH ME metal bronze pigments show no tendency of becoming green or grey and are stable to the usual temperature (up to 190 °C).

Mixtures with aqueous screen printing pastes which are ready for printing can only be stored for a limited time; therefore they should be used up immediately (1 - 2 working days).

#### COLORMATCH SLV Colours

COLORMATCH SLV colours are suitable for colouring TUBICOLL flock adhesives based on solvents or high solids.

The colour pigments stand out due to their high fastness to light and weather.

## **Application Procedure**

#### COLORMATCH Standard Pigments and COLORMATCH FL Fluoro colours

COLORMATCH colour pigments are mainly applied for colouring aqueous screen printing pastes, adhesive dispersions or aqueous transfer systems, e. g. PRINTPERFEKT screen printing pastes, TUBITRANS PRINT or TUBITRANS BOND flock transfer systems, TUBVINYL flock adhesive dispersions, TRANSPRINT printing transfer systems.

#### COLORMATCH GLF Glitter and COLORMATCH ME Metal Bronze Pigments

COLORMATCH GLF glitter or metal bronze pigments are usually applied in transparent, aqueous adhesive dispersions (PRINTPERFEKT LC 647, TUBVINYL 235 SL, TUBVINYL 235 S, TUBVINYL 235 MC, TUBVINYL LC 274 H-N) or in transparent plastisol pastes for the direct printing on textiles.

Moreover, the products can be applied in aqueous transfer printing systems or plastisol transfer systems.

#### COLORMATCH PH 451 GREEN

COLORMATCH PH 451 GREEN serves for producing green-yellow colour effects which are luminescent in the darkness after having been exposed to light. The luminescent period and the intensity depend on the stored light energy; normally the gradually diminishing afterglow effect lasts up to 30 min. By addition of a very low amount of standard pigments the green-yellow basic shade can be tinted to a certain extent.

Afterglow effects are preferably applied for safety reasons (working clothes, sportswear, marking of escape routes) or for fashionable special effects (disco fashion).

The basic pastes recommended for COLORMATCH PH 451 GREEN are TUBVINYL 235 SL for direct printing, TUBITRANS BOND or TUBITRANS ELASTOBOND for transfer printing.

#### COLORMATCH SLV Colours

COLORMATCH SLV colours are recommended for colouring adhesive systems containing solvents, e.g. TUBICOLL 1510 A / TUBASSIST FIX 1060 L or TUBICOLL 1405 types.



#### **Recommendation for Use / Processing**

In general, the application amounts are as follows:

| COLORMATCH standard colours | up to 6 % on light-coloured substrates, up to 10 % in covering lac pastes |
|-----------------------------|---|
| COLORMATCH FL colours       | 5 - 20 %  |
| COLORMATCH GLF glitter      | 1 - 5 % (sparkling) or 15 - 20 % for covering glitter effects             |
| COLORMATCH ME 112 GOLD/     |   |
| COLORMATCH ME 182 BRONZE    | 15 - 20 %   |
| COLORMATCH ME 802 SILVER    | 10 - 15 %   |
| COLORMATCH PH 451 GREEN     | 15 - 25 %   |
| COLORMATCH SLV types        | usually 0.1 - 6 %   |

The application of COLORMATCH colour systems is usually effected by screen printing through suitable screens. If necessary, the application by means of spraying guns or brushes is also possible. Especially for COLORMATCH GLF glitter types we recommend monofilament PES screen gauzes of 12 - 18 T/S and for COLORMATCH ME metal bronze pigments no. 26 - 38 T/S.

We recommend to mix the COLORMATCH pigments homogeneously with the basic paste by means of a suitable stirrer or a shaking machine; a strong paste heating has to be avoided.

On weighing-in smallest concentrations, e. g. for tinting, it is advisable to use basic colour pastes of a concentration of 10 % or 1 %.

We recommend making it a rule to test the suitability of the pigments for the intended application field with regard to compatibility as well as processing parameters and the influence on the final result before starting to produce and to control everything during production.

#### We reserve the right to modify the product and technical leaflet.

#### Our department for applied technique is always at your service for further information and advice.

Our technical advice and recommendations given verbally, in writing or by trials are believed to be correct. They are neither binding with regard to possible rights of third parties nor do they exempt you from your task of examining the suitability of our products for the intended use. We cannot accept any responsibility for application and processing methods which are beyond our control.

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