



QUASAR s.r.l. **SCREEN PRINTING AND DIGITAL INKS**

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TECHNICAL DATA SHEET

267.000 PLASTISOL NEW

SAFETY DATA

Ink based on selected and top quality vinyl resins. All 267.000 PLASTISOL NEW components are in compliance with the REACH regulation (CE) n. 1907/2006 of the European Parliament and of the Council concerning the registration, evaluation, authorization and restriction of chemical substances and related updates and summaries. 267.000 PLASTISOL NEW complies with the ISO EN 71/9 standard concerning the presence of hazardous solvents. 267.000 PLASTISOL NEW is exempt from the following substances subject to registration:

- persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative substances (vPvB) according to Annex XIII Reach;
- substances included in the list subject to authorization, defined in accordance with Article 59;
- substances that exceed EEC limits at the workplace;
- substances subject to restrictions on the manufacture, placing on the market and use of substances and preparations as defined in Annex XVII.
- SVHC substances (Substances of Very High Concern) listed in the CANDIDATE LIST of substances of very high concern for Authorization, published in accordance with Article 59 of the REACH Regulation.

The precise choice of not having harmful and toxic components allows 267.000 PLASTISOL NEW to be used safely in the workplace, extending the intervals of legal visits.

The formulation of any Sample Tint for the reproduction of each color according to the Spectrophotometric method is provided free of charge to the customers.

CHARACTERISTICS AND ADHERENCE

PLASTISOL NEW 267 has a semi-glossy and perfectly homogeneous appearance, free from flocculations. It has a very high opacity. The special odorless solvent mixture makes the ink always fresh on the printing frame, always open. The base resins give the ink an exceptional resistance to washing up to 60 ° C and a great elasticity on the fabric without any breaking of the ink veil in case of stretching. The ironing of the garment must be done from the opposite side of the print or by protecting the printing area with a cloth. Adheres to all fabrics in cotton, natural fiber, acrylic and mixed acrylic, non-woven fabric and many other types of natural and mixed fibers that can withstand cooking up to 150 ° C for 5 ', or to I.R. medium wave for 30 ". On polyester the resistance is good. For printing on particular materials, special pigmentations, special effects, specific application additives, please ask for advice from our laboratory, equipped with a substantial database. It can be printed on paper silicone coated for transfer printing, taking care not to exceed the number of passages in the oven for multi-colored prints, in which case add 267 PLASTISOL NEW with a retarder in proportion to the steps in the oven.

RESISTANCE

267 PLASTISOL NEW is manufactured with quality pigments that reach, in the range of colors, the maximum value of the wool scale 7/8 - 8. The UNI 5773-66 standard establishes the criteria and the evaluation of pigment quality values. 267 PLASTISOL NEW has a high resistance to outside, to salt spray, to washing with common detergents and to ironing. Not resistant to dry cleaning. Always check that the ink thickness and cooking are correct. Without baking does not dry.

267.743 PLASTISOL NEW BIANCO FLASH

is a white ink specially designed for the subsequent printing of 2 whites in an automatic machine with drying with spots. 267.743 PLASTISOL NEW WHITE FLASH can be printed with fabric from 32.100 PW up to 77.55 PW. White Flash dries at temperatures near 110 ° C in a time of about 10 ". The drying spot must be composed of infrared quartz lamps with an average power of 5/6 kw. Other types of lamps can vary the time of permanence. After passing under the spot it can be overprinted with 267.741 PLASTISOL NEW WHITE or with the same 267.743 White Flash obtaining an identical exceptional coverage with great elasticity. The 267.743 White Flash is perfectly matted and does not remain sticky after passing under the spot. It does not get absorbed by the fabric and gives an exceptional opacity to the 267.741 Opaque White and also to the other overprinted colors. In many cases it is preferred instead of the Opaque White 267.741 for its great practicality of use. It is recommended in the printing of the white base for the four-color process.

CMYK FOUR-COLOR PROCESS.

267 PLASTISOL NEW Four-color EUROPE scale uses the Europe Scale according to ISO 2846. In four-color printing it is very useful to enhance the thixotropic capacity of the ink by mixing it with 267.130 THIXOTROPIC GEL up to 30% without fearing for the loss of intensity of the color tone. The dilution of the four-color ink must be done with 290.30 RITARDANTE. During Four-color printing, it is advisable to re-integrate the ink on the frame with other, slightly more diluted ink at set times.

In the Four-color selection always use the UCR option or better GCR and follow the values of ratio wire diameter / point diameter. For information on correcting density selection curves in order to obtain the exact reproduction of the original and reduce the effects of the Tint Error, Trapping, Print Contrast etc. we recommend consulting the Treatise on Serigraphy, by Franco Lo Giudice.

DRYING AND TRANSFER PRINTING

- DIRECT PRINTING: 150 ° C is required for 5 'in a hot air oven (convection). In medium wave infrared ovens with ventilation and air recirculation, full power lamps, the time varies from 20 "to 30". In any case the oven room temperature must be above 120 ° C. In Infrared ovens without air circulation we recommend specific tests.

Infrared ovens with thermostat-controlled lamps are not recommended. As a general rule, cross the first colors quickly and reduce the speed of the oven mat to the last color. In order to increase the softness of the final coat, it is possible to press the moldings again with a silicone paper of protection at a temperature of 150 ° C for 15 ".

The use of fabrics of considerable thickness, for example with a thread diameter greater than 100 microns, depositing large thicknesses of ink, prolong the drying time.

- TRANSFER PRINTING: to print in window decal on slightly siliconed paper or on polyester sheets. We recommend reticulating the first colors quickly 120 ° C - 130 ° C for 15 "/ 20" for each color. The color coming out of the oven must be sticky but without releasing the color. The last color, usually white, can be dried at 150 ° C for 20 "/ 25".

- FOR TRANSFER we recommend the 502.180 THERMOPLASTIC GLUE, which must be spread on the final wet ink, before the final inforno passage. Beat the sheet to remove excess. The 502.180 THERMOPLASTIC GLUE must be dried in the oven with passage (IR) at 150 ° for 20 "- 30". The final printout will be transferable to many natural and synthetic fabrics at 150 ° for 30 "- 40".

Cold skin. The operator must, under his responsibility, always carry out compatibility and resistance tests to test the effective adherence and resistance of the product on the various fabrics, many times of unknown composition.

THINNERS

PLASTISOL NEW 267 is supplied with viscosity ready for printing. In any case you should always shake the ink before use with the help of a motorized propeller for at least 2/3 minutes at a very slow speed, not exceeding 300 rpm. It is recommended not to heat the ink. Any dilution must take place during agitation. Since it is an ink with a total absence of phthalates, it is possible that over time the viscosity of the product will increase. To restore the ink to the desired viscosity, dilute with 290.30 RITARDANTE to an adequate extent. Table of available diluents and additives:

THINNERS	NOXIOUSNESS	EVAPORATION	TECHNICAL FEATURES
267.604 ADDITIVO ALTO RIGONFIAMENTO High Puff	non-toxic, no smell	none	Up to 30% is added in order to obtain high thicknesses. The swelling must be allowed to lower slightly, by slightly prolonged cooking, to increase the scratch resistance. Cooking 150 ° C for 30 '
290.30 RITARDANTE Retarder	non-toxic, no smell	none	Concentrated viscodepressor, add to 5% ink. The product makes the ink fluid, it no longer sticks to the squeegee. Does not reduce opacity, which remains maximum. Does not polish the ink.

PRINTING ADVICE

Always use well-stretched frames with a slight inclination of the fabric with respect to the frame. Adopt all the techniques connected with the reduction of the RZ factor. In high definition cases use sharp blade scrapers and high shore polyurethane rubbers, preferably supported (three-layer). In the case of solid bases always consider that the distension of the ink occurs at a higher possible printing speed and with high doctor blade pressure and not the other way round. In some cases, to obtain high coverage, we recommend printing with the contact frame, ie without Snap distance.

During printing, large percentages of solvent evaporate, therefore the lost quantity must be replenished. As already mentioned in the Quadricromia paragraph, it is advisable to add to the ink on the frame other ink slightly more diluted at set times. It tends to print at a constant rate even if less fast than at alternating speed, so as to stabilize the thixotropy of the ink as much as possible. When washing the frame, do not wash it in single areas at a time but globally, at least during particularly difficult and screened prints.

267.135 CUTTING PASTE is used in the printing of transparent colors that must take on the opaque appearance

The average ink yield exceeds 30 square meters. with 77.55 PW fabric, medium thickness emulsion, factor RZ 10/15. The matrix must be resistant to solvents. The recommended fabrics range from 32.100 PW for bottoms up to 120.34 PW for high line patterns.

DRYING (curing)

267 PLASTISOL NEW normally diluted, without the use of retardants, does not dry in ambient air. In convection ovens, it generally dries at 150 ° C for 5 '. In IR ovens the drying varies according to the power and distance of the lamps or radiant panels from the fabric. Indicatively it dries, at medium ink thickness, at 150 ° C 20'-25 '. In hot press, pressure 1 bar, the approximate time is 45 "at 150 ° C. The use of the hot dryer can be indicated for sporadic applications but not for production.

GUARANTY

QUASAR produces inks and screenprinting products with competence and experience and a quality control system with regards to raw materials used during the various elaboration processes.

Product components undergo a series of controls and continuous check and the results are archived along with the necessary samples of each separate product. This is of course in the interests not only of the manufacturer but also the customer.

The use and application of QUASAR srl products is so vast to escape every type of control, so the only guarantee that is guaranteed is the replacement of the product if it is proved to be defective or erroneous production.

The printer is therefore always responsible for choosing the type of ink used, and must perform appropriate preventive printing tests in order to verify the suitability for specific requests.

However, the major number of printing problems arise from bad application or a bad product choice.

QUASAR laboratory and its technicians are available to give advice, make necessary corrections to, or personalise, their screen printing products.

We do therefore always hope for a tight collaboration with our customers so that we can always improve in the screen printing environment. The guarantees of quality and production are recognized by QUASAR srl exclusively for their inks packed in the original containers of kg.1 and 5 and in all the other packages of mother house sealed at the origin.

COLOURS GUIDE 267 PLASTISOL NEW

130 GEL TIXOTROPICO	363 ROSA FLUO	561 VERDE FLUO
135 PASTA DA TAGLIO	372 SOLFERINO	604 ADDITIVO RIGONFIANTE
141 BASE COPRENTE	375 VIOLA	741 BIANCO COPRENTE
200 GIALLO FREDDO	400 AZZURRO	743 BIANCO FLASH
231 GIALLO MEDIO	411 BLU CHIARO	781 ARGENTO
241 GIALLO CALDO	421 BLU OLTREMARE	787 ORO RICCO
261 GIALLO FLUO	431 BLU MEDIO	800 NERO
300 ARANCIO	451 BLU NOTTE	271 GIALLO EUROPA
311 ROSSO GIALLASTRO	511 VERDE CHIARO	371 MAGENTA EUROPA
321 ROSSO VIVO	521 VERDE MEDIO	471 CYAN EUROPA
331 ROSSO RUBINO	541 VERDE SOLIDO	871 NERO EUROPA
361 ROSSO FLUO	551 VERDE SCURO	502.180 COLLA TERMOPLASTICA

ANY PARTIAL REPRODUCTION IS FORBIDDEN