T.D.S. Rev. 09/2021 Screen Printing



Thermoplus 49.000

Code A31149000

PRODUCT DESCRIPTION

Thermoformable vinyl-acrylic ink with glossy finishing.

APPLICATION FIELDS

This product is particularly indicated for printing of PC and PMMA plates that are to be thermoformed, as well as for realizing of pop and advertising graphic works.

APPLICATION PROCESS

Substrates	Paper, paperboard, PVC, PC, PMMA
Th/Cm	From 43 to 120 Th/Cm
Emulsion	Zero - In SV Plus ViolaZero - In SR-V
Squeegee	Square edge Squeegee hardness 70 - 75 Shores
Drying	Tack-free is reached at room tem- perature within 30 min., or at 50- 60°C for a few minutes
Thinner	Thinner 90.913 Normal Odourless Thinner 90.918 Slow
Retarder	Tixo-Vinyl Retarder 8159-V-9 (code A3149088800) Max 30% 90.923 Retarder Odourless (code A31890923001)
Adhesion Promoter	Adhesion promoter 90.908 (code A31890908000) Max. 10%
Levelling Agent	Levelling 90.970 (code A31890970000) Max. 2%
Cleaning	Solvent LQ 90.920
Storage	If kept in its original sealed package, the product has a shelf-life of 2 years
Package	See the product range table
Safety Data Sheet	Available on request

GENERAL FEATURES

- Thermoformable
- Excellent chemical resistance
- Excellent flexibility
- Excellent outdoor resistance
- Excellent adhesion onto thermoformable materials
- No blocking

PREPARATION

Before using it, the ink must be mixed well and, in case, diluted, according to printing requirements.

TECHNICAL FEATURES

The performance of the product, printed with a 120 th/cm screen, is 50-60 m²/Kg. These data are merely an indication, since they depend on the dilution, the substrate and the printing equipment. *Thermoplus* series has an outdoor resistance (inclement weather, sunlight) up to 5 years.

These data are highly influenced by the kind of substrate to be printed, the altitude, the geographical position and the air pollution.

The addition of high percentages of white or transparent base to the ink causes a substantial reduction in its light resistance.

In case that an increase in outdoor and chemical resistances is required, it is possible to overprint with the special varnish *Thermoplus Overprint V* (code A31149044005).

The version *Thermoplus 49.103 White Extra Toys*, a non-yellowish opaque white, has been developed particularly for thermoforming process on PC and PMMA sheets.

THERMOPLUS SCREEN PRINTING



SPECIAL INSTRUCTIONS

- Always test the characteristics of the product, before starting production.
- The above information is the result of previous knowledge and experience; it is neither a guarantee nor an assurance.
- In order to improve adhesion on such nonthermoformable substrates, that are difficult to be printed, it is possible to add up to 10% Adhesion Promoter 90.908. Through the addition of such promoter, the ink has a pot-life of about 8 hours. However, the incorporation of this promoter may affect the thermoforming process.
- For printing of those substrates, that are sensitive to solvents, such as PC and PET-G, it is recommended to

PRODUCT RANGE

BLACK and WHITES

CODE	PRODUCT	PACK.
A31149103005	WHITE EXTRA TOYS	5 kg
A3114910000-	WHITE TOYS	1 and 5
		kg
A31149140005	SATIN WHITE TOYS	5 kg
A3114970000-	BLACK TOYS	1 kg
A31149701001	OPAQUE BLACK TOYS	1 kg

FOUR-COLOUR PROCESS

CODE	PRODUCT	PACK.
A31149297001	YELLOW EUROPE TOYS	1 kg
A31149397001	MAGENTA EUROPE TOYS	1 kg
A31149497001	CYAN EUROPE TOYS	1 kg
A31149797001	BLACK EUROPE TOYS	1 kg
A31149880001	THIXOTROPIC GEL TOYS	1 kg

OPAQUE COLOURS

CODE	PRODUCT	PACK.
A31149200001	PRIMEROSE YELL. TOYS	1 kg
A31149202Y001	CHROME YELLOW TOYS	1 kg
A31149303Y001	RED TOYS	1 kg
A31149304Y001	RUBY RED TOYS	1 kg
A31149404001	BRILLIANT BLUE TOYS	1 kg
A31149541001	OPAQUE GREEN TOYS	1 kg

OTHER COLOURS

CODE	PRODUCT	PACK.
A3114980000-	TRANSPARENT BASE TOYS	1 and 5 kg
A31249122005	SATIN. TRASP. AN- TISCR.	5 kg
A31249850005	BRONZE BINDERI	5 kg
A31149044005	OVERPRINT W.	5 kg
A31149125001	SILVER NO LEAFING	1 kg
A31149424001	RICH PALE GOLD TOYS	1 kg

TRANSPARENT BASES

CODE	PRODUCT	PACK.
A31149A200001	PRIMEROSE YELL. TOYS	1 kg
A31149A202001	CHROME YELL. TOYS	1 kg
A31149A301001	ORANGE TOYS	1 kg
A31149A303001	RED TOYS	1 kg
A31149A305001	CARMINE RED TOYS	1 kg
A31149A404001	BLUE TOYS	1 kg
A31149A440001	VIOLET TOYS	1 kg
A31149A500001	LEAF GREEN TOYS	1 kg

IMPORTANT NOTE

The information given in this technical sheet is not intended to be exhaustive and any person, using the product for any purpose other than that specifically recommended in this sheet without first obtaining written confirmation from us of the suitability of the product for the intended purpose, does so at his own risk.

While we endeavour to ensure that all advice we give about the product is correct, we have no control over either the quality or condition of the substrate or the many factors affecting the use and application of the product.

Therefore, unless we specifically agree in writing to do so, we do not accept any liability whatsoever or howsoever arising for the performance of the product or for any loss or damage arising out of the use of the product.

The information contained in this sheet is liable to modification from time to time in the light of experience and our policy of continuous product development.