

STV-NT PAD PRINTING INK

CHARACTERISTICS:

STV is a single and two-component ink, with vinyl base and good chemical resistance. It is glossy, well covering and it dries rapidly.

APPLICATION:

STV is indicated for ABS, SAN, polycarbonates (PC), polystyrene (PS), PET, rigid and soft PVC, Plexiglas (PMMA) and some thermosetting resins. Good results achieved also on paper, wood, hide, some painted surfaces, polyurethanes and polyester.

USE AND DILUTION:

STV is a single and two-component ink and, when used as a single-component ink, it must be diluted with the universal pad printing thinner D2 in a varying quantity from 5% to 20%.

In warm ambient and in presence of fine details or screened images, should be necessary an evaporation thinner delay. In these cases the use of medium thinner M2 instead of thinner D2 or the add of little quantity of retarder R2 in progressive ratios, till a maximum of 10%, is recommended.

In machines with hermetic doctoring refresher device, that is where the image size don't fit into ink cup size, it is advisable the add of thinner BGA (see Technical Additives Data Sheet) in a varying quantity from 5% to 15%.

When it is used as a two-component ink, before dilution, STV shall be mixed with the specific thinner C1 in a ratio of 10:1 (STV:C1).

This mixed catalyst-ink (pot life) will last 8-10 hours in a room temperature of 20°C approx., then resistance and adhesion will be reduced, even if the ink seems fluid and in working condition.

An elevated room temperature reduces pot life.

Instead of hardener C1, also hardener C1N (aliphatic) can be used, which is slower in the reaction, but it increases the ink pot life into the machine, amplifies elasticity and it doesn't turn yellow with the time.

DRYING AND HARDENING:

STV dries up by thinner evaporation and drying time (dust dry) at room temperature of 20°C approx is around 1-2 minutes.

You can fast drying time by using ovens with circulating hot air at about 60-80°C or spot devices at high temperature (working with air or infrared rays), directly assembled on parts conveyor systems (i.e.: rotary tables, conveyors, etc.). In this last case, drying time lasts just few seconds. When it is used as a two-component ink, the complete ink hardening happens by a chemical bond between ink resin and hardener and it is completed after 5-6 days.

We can resume drying and hardening time in a room temperature of 20 °C approx as below:

Dust dry: 1-2 min.

Stackable: 10-15 min.

Complete hardening: 1-2 days (as single-component) 5-6 days (as two-component)

Pot life (when used as two-component): 8-10 hours

RESISTANCE:

After hardening is completed, STV has an excellent resistance to various chemical products, alcohol, most used domestic cleaners, acids and diluted alkalis, grease and oils.

STV pigmentation has a light resistance varying from 6 to 8 Din.

SAFETY:

Read carefully ink safety data sheet before using. Safety data sheet are compiled in compliance with European Standard 91/155, concerning dangerous agents; you will find instructions relative to precautionary use, storage and first aid measures.

CLEANING:

To clean all parts coming in contact with ink, it is suitable thinner TAV, either for manual use and in parts cleaning automatic devices.

For cleaning in ultrasound devices use the specific cleaner HTV

STORAGE:

STV, stored in a fresh and dry ambient, in sealed packages, shall resist about 2 years.

More details are listed in proper safety data sheet.

FLASH POINT:

Over 40°C



RANGE OF COLOURS:

The reference for STV is TOSH GLOSS COLOURS TABLE for two-component inks that includes a selection of 22 standard, 11 MX colours, 3 process shades.

Different gold and silver shades can be prepared with series PO and PA paste (see Addictive technical data sheet). These are prepared at the moment of use adding the paste to the transparent base with this mixing ratio:

Transparent base BTV/ golden paste PO = 3/1

Transparent base BTV/ silver paste PA = 4/1

All colours shades can be blended with one another. To prepare special shades use MX series colours.

It is possible to have special shades samples on demand.

All pigments that compound the STV COLOURS TABLE below to NT series (no toxic), that means in compliance with European Standard EN 71/Part 3, heavy metals and migration of hurtful elements free.

GLOSS COLOURS FOR 2-COMPONENT INKS

A1X.STV 01/G	LEMON YELLOW
A1X.STV 02/G	MEDIUM YELLOW
A1X.STV 03/G	HOT YELLOW
A1X.STV 06/G	ORANGE
A1X.STV 08/G	OCHRE YELLOW
A1X.STV 11/R	LIGHT RED
A1X.STV 12/R	BRIGHT RED
A1X.STV 13/R	CARMIN RED
A1X.STV 16/R	PINK
A1X.STV 21/B	LIGHT BLUE
A1X.STV 22/B	MEDIUM BLUE
A1X.STV 23/B	ULTRA BLUE
A1X.STV 24/B	DARK BLUE
A1X.STV 25/B	TURQUOISE
A1X.STV 28/B	VIOLET
A1X.STV 31/V	LIGHT GREEN
A1X.STV 32/V	PINE GREEN
A1X.STV 33/V	BRIGHT GREEN
A1X.STV 41/M	LIGHT BROWN
A1X.STV 42/M	DARK BROWN
A1X.STV 00	WHITE
A1X.STV 100	BLACK

MX COLOURS

A1X.STV 101/MX	YELLOW
A1X.STV 102/MX	HOT YELLOW
A1X.STV 103/MX	ORANGE
A1X.STV 111/MX	RED
A1X.STV 112/MX	BRIGHT RED
A1X.STV 116/MX	MAGENTA
A1X.STV 122/MX	BLUE
A1X.STV 128/MX	VIOLET
A1X.STV 131/MX	GREEN
A1X.STV 00/MX	WHITE
A1X.STV 100/MX	BLACK

QUADRICROMY COLOURS

A1X.STV 60/GQ	PROCESS YELLOW
A1X.STV 61/RQ	PROCESS MAGENTA
A1X.STV 62/BQ	PROCESS CYAN

TRASPARENTS

A1X.STV BTV	TRASPARENT BASE
A1X.STV PTV	CUT PASTE

STV is available in 1 and 5 kg. cans

ADDITIVES RANGE

For additional information about single products make reference to specific ADDITIVES Technical Data sheet.

NOTE

Information contained in this data sheet is given in absolutely good faith and based on our current knowledge. It should not be taken as binding, since the employment conditions of the products are out of our control. We do recommend to perform trial tests to verify the suitability of the product before starting a new production. The product utilization for the different application is exclusively under the customer responsibility.