

THINNER V2

CHARACTERISTICS:

Thinner V2 is a fast evaporating thinner, suitable for applications where faster drying is required. Compatible with all types of TOSH ink, V2 may also be used to assist drying between colours for multiple colour applications, and to minimize the chances of handling related defects in applications where automatic part ejection is included.

USE:

V2 may be used alone or blended with other TOSH thinners as required to properly adjust drying time. The recommended ratio for the addition of V2 to ink is 5% - 25% depending upon working conditions.

PACKAGE:

V2 is available in 1 lt. tin

THINNER D2

CHARACTERISTICS:

D2 is the universal, medium speed thinner for TOSH inks. Used for most common applications, D2 offers a superb balance of evaporation rate and solvent action.

USE:

D2 may be used alone or blended with other TOSH thinners as required to adjust drying time. The recommended ratio for the addition of D2 to ink is 5% - 25% depending upon working conditions.

PACKAGE:

D2 is available in 1 lt., 5 lt. and 200 lt. tin

THINNER D4

CHARACTERISTICS:

D4 thinner is specifically designed to be used with STF ink. The raw materials contained conform to the most severe international restrictions on safety rules. D4 is usable also with other inks.

D4 offers a superb balance of evaporation rate and solvent action.

USE:

The recommended ratio for the addition of D4 to ink is 5% to 25% depending upon working conditions.

PACKAGE:

D4 is available in 1 lt., 5 lt. and 200 lt.

THINNER DM

CHARACTERISTICS:

DM thinner is designed to make TOSH inks printable via the screen printing process. This enables the TOSH ink customer to realize consistency of appearance when applying the same ink using two different processes.

DM thinner has a medium speed evaporation rate, making it suitable for use in "slowing" down other TOSH thinners as necessary to achieve optimal image quality.

USE :

DM may be used alone or blended with other TOSH thinners as required to adjust drying time. The recommended ratio for the addition of DM to ink is 5% - 25% depending upon working conditions.

PACKAGE:

DM is available in 1 lt. tin

THINNER LM

CHARACTERISTICS:

LM thinner was developed specifically for thinning TOSH inks for screen printing. LM is very slow evaporating, making it ideal for warmer operating conditions, and for printing fine details without having to thin as often as with other thinners. LM may also be use in pad printing inks where the time between image pick up and transfer is extremely long.

USE :

LM may be used alone or blended with other TOSH thinners as required to adjust drying time. The recommended ratio for the addition of LM to ink is 5% - 25% depending upon working conditions.

PACKAGE:

LM is available in 1 lt. tin

THINNER M2

CHARACTERISTICS:

M2 thinner is a medium speed thinner specifically intended for STM ink, and is slower than D2, making it an excellent thinner for warmer operating conditions, and for printing fine details where D2 is too fast.

USE:

M2 may be used alone or blended with other TOSH thinners as required to adjust drying time. The recommended ratio for the addition of M2 to ink is 5% - 25% depending upon working conditions.

PACKAGE:

M2 is available in 1 lt. tin

THINNER R2

CHARACTERISTICS:

R2 thinner is a basic retarder, with very slow evaporation. It cannot be used by itself to delay drying, but it can be blended with other thinners to make their molecules heavier, and thus slower evaporating. It is ideal for warmer operating conditions, for making inks more suitable to print fine details, and in cases were a longer interval between dilutions is required.

USE:

R2 may be used alone or blended with other TOSH thinners as required to adjust drying time. The recommended ratio for the addition of R2 to ink is 5% - 15% depending upon working conditions.

PACKAGE:

R2 is available in 1 lt. tin

THINNER R3

CHARACTERISTICS:

R3 is an especially slow retarder for use when R2 cannot sufficiently slow drying. Used with those inks that have a very fast solvent base or long working cycle, and where times between image pick-up and transfer is extremely long.

USE:

R3 may be used alone or blended with other TOSH thinners as required to adjust drying time. The recommended ratio for the addition of R3 to ink is 5% - 15% depending upon working conditions.

PACKAGE:

R3 is available in 1 lt. tin

THINNER DG2

CHARACTERISTICS:

DG2 thinner is specifically for use with STG ink, dissolving the resins as required to achieve adhesion on rubber and polyurethane substrates.

USE:

DG2 is added to the ink in ratios varying from 5% to 25% depending upon working conditions, alone or blended with RG2 retarder. If thinning is not sufficient, add KAN thinner.

PACKAGE:

DG2 is available in 1 lt. tin

THINNER RG2

CHARACTERISTICS:

RG2 retarder is specifically for use with STG ink. It must be blended with DG2 thinner to delay drying, and is excellent for warmer conditions, for printing fine details, and when the time between image pick-up and transfer is extremely long.

USE:

RG2 retarder is added to the ink in ratios varying from 5% to 15% depending upon working conditions blended with thinner DG2. Additionally, if retarding is not sufficient, use R3 retarder.

PACKAGE:

RG2 is available in 1 lt. tin

THINNER DP2

CHARACTERISTICS:

DP2 is the basic thinner for use with TOSH STP ink. It is formulated to dissolve the ink's polyolefin additives, thus aiding the pick-up and transfer efficiency of STP.

USE:

DP2 thinner may be used alone at 5% - 25%, or blended with retarder RP2.

PACKAGE:

DP2 is available in 1 lt. tin

THINNER RP2

CHARACTERISTICS:

RP2 is the retarder for use with TOSH STP ink. It must be blended with DP2 thinner to delay drying, and is excellent for warmer conditions, for printing fine details, when the time between image pick-up and transfer is extremely long and when promoter PA1 makes the ink's drying too fast.

USE:

RP2 retarder is added in combination with DP2 thinner at 5% - 15%, depending upon working conditions. If retarding is not sufficient, add R3.

PACKAGE:

RP2 is available in 1 lt. tin

THINNER DB2

CHARACTERISTICS:

DB2 thinner may be used as an alternative to D2 thinner when mixing / blending colours. DB2 is formulated to allow for the fusion of pigments, and is medium speed. Originally developed for use with TOSH STB ink, DB2 can be use with other TOSH inks not requiring specific thinners.

USE:

DB2 thinner is added at 5% - 25%, alone or blended with other TOSH thinners as required dependent upon working conditions.

PACKAGE:

DB2 is available in 1 lt. tin

RETARDER PASTE PR2

CHARACTERISTICS:

PR2 is a gel retarder paste. It may be added to TOSH inks as an alternative to liquid R2 retarder when it is necessary to keep the viscosity high while delaying drying. Specifically it is suggested for applications where printing with a low viscosity may result in issues with brightness and uniformity. PR2 is also useful in hermetic systems in instances where the image is outside of the ink cup's diameter.

USE:

PR2 is not used alone, but is blended with TOSH thinners and / or retarders and added at a combined 5% - 20% as required by working conditions.

PACKAGE:

PR2 is available in 1 kg. can

THINNER BGA

CHARACTERISTICS:

BGA thinner acts to quickly fluidize the ink in the cliché. Because of its medium speed, it is recommended for using in hermetically sealed ink cups, especially in cases where the image does not fit in the ink cup (for example Refresher applications).

USE:

BGA may be used alone or blended with other TOSH thinners or retarders. The recommended ratio for the addition is 5% - 25% depending upon working conditions.

PACKAGE:

BGA is available in 1 lt. tin

THINNER XVS

CHARACTERISTICS:

XVS is useful for removing ink from certain types of plastic without damage. It is also useful for thinning ink for printing on materials that are sensitive (crazing) to thinners, such as crystal polystyrene. Finally, XVS is useful for removing excess silicone oil from the surface of pads without damaging the pad or reducing its work life.

USE:

XVS is used to clean the ink from rejected parts and it can be added alone or blended with other TOSH thinners at 5% - 25% depending upon working conditions.

PACKAGE:

XVS is available in 1 lt., 5 lt. and 25 lt. tin

THINNER KAN

CHARACTERISTICS:

KAN is a very aggressive thinner use in combination with other TOSH thinners to improve fast dispersion and adhesion of the ink on materials that are otherwise solvent resistant. It helps other thinners to rapidly mix with inks, and therefore is useful in thinning heavily bodied inks in hermetic applications.

USE:

KAN is added in combination with other TOSH thinners at 5% - 25% depending upon working conditions. The most used ratio is 70 parts D2 to 15 parts BGA and 15 parts KAN.

PACKAGE:

KAN is available in 1 lt. tin

THINNER TAV

CHARACTERISTICS:

TAV is a thinner used to clean parts that come in contact with the ink during printing (for example, it is useful in manual or automatic cleaning of ink cups, inkwells, doctor cups and rings, doctor blades, etc.).

TAV has a light, non-pungent scent, and a high load capacity, making it efficient for long periods of time, even when appearing dirty. The low environmental impact of TAV makes it safe even in the working environment.

TAV may also be used to remove silicone from the surface of pads without damaging the pad or reducing its work life.

USE:

Used to clean all parts which get in touch with the inks.

PACKAGE:

TAV is available in 5 lt., 25 lt. and 200 lt. tin

CLEANER HTV 4

CHARACTERISTICS:

The new cleaner HTV 4 specific for ultrasonic cleaning machine, has been developed by TOSH for cleaning all parts that are in contact with inks and must be cleaned, also suitable for manual cleaning. It has low evaporation and emission into the atmosphere and allows long usage time before replacement, has a neutral odour and high flash point so that it can be used safely up to 40 ° C.

HTV 4 is already very efficient at room temperature. All raw materials of cleaner HTV 4 have already been registered at REACH, ensuring the stability of the formulation in the future. The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials. It does not require ADR class for transport.

USE:

It is mainly used in ultrasonic cleaning tanks. It's characterized by a high solvent power and is able to remove even long-time dried inks. The high flash point (65 ° C) allows the safe use up to 40 ° C.

PACKAGE:

HTV 4 is available in 5 and 20 kg plastic cans.

SPRAY CLEANER SP1

CHARACTERISTICS:

SP1 Spray Cleaner is practical for small, daily pad printing use. Because it is a spray, it can reach areas that are otherwise difficult to clean. SP1 should not be used to clean during the use of catalyzed inks on press, as it may alter the chemical reaction of the catalyst and ink. The low environmental impact of its solvent's formulation makes it safe even in working environment.

USE:

Most frequently used for removing silicone ink from the surface of transfer pads without damaging the pad or reducing its work life.

PACKAGE:

SPRAY CLEANER SP1 is available in 0,5 lt. spray packing

PRIMER PE

CHARACTERISTICS:

PE is a liquid primer for EVA and similar materials that otherwise have a surface energy lower than 36° Dyne. Developed specifically for EVA (ethylvinylacetate) it can be used on other elastic materials, as Megol, Santoprene, etc.

USE:

It is applied with a cloth or a sponge, spray or by immersion, trying to spread a very thin primer veil, to avoid scratch on the surface that will ruin the aspect; wait the complete evaporation of the thinner part (15-20 minutes) and then proceed with the print, that should be done immediately after the dry or in few minutes. The complete adhesion is obtained after 24 hours. The product can be stored about 12 months if maintained in original sealed packages and in a fresh, dry and aired ambient. It suffer intense cold and hot.

PACKAGE:

PRIMER PE is available in 1 lt. tin

PRIMER PP

CHARACTERISTICS:

PP is a primer for use on polyolefins such as polyethylene (PE) and polypropylene (PP) have a very slow surface tension, less than 36° Dyne, that otherwise would not allow inks to flow out and adhere sufficiently. These materials must be pre-treated with systems that modify their surface tension and allow to the inks to spread and to grip. PP Primer for polypropylene is a liquid polyolefin thinner to be wiped onto the polyolefin's surface to increase adhesion.

USE:

PP is applied using a cloth or sponge. Apply a very thin layer to avoid ruining the appearance of the substrate, wait for the material to evaporate, and proceed as soon as possible thereafter with printing. Waiting more than a few (20-30) minutes after priming may require that you re-apply PP.

PACKAGE:

PRIMER PP is available in 1 lt., 5 lt. and 200 lt. tin

ADHESION PROMOTER PA1

CHARACTERISTICS:

PA 1 is used to improve the adhesion of TOSH inks on some materials. It is essentially formulated using the same components as primer, but with a more concentrated, more viscous result. It binds best with STP and STE inks for use in printing on polypropylene (PP).

USE:

PA 1 is added at 5% - 15% depending upon working conditions. The addition of PA 1 may reduce drying time, so it is sometimes necessary to add more thinner or a retarder to counter this effect.

PACKAGE:

ADHESION PROMOTER PA 1 is available in 1 lt. tin

MATT PASTE OP1

CHARACTERISTICS:

OP 1 is a matt paste. Having the appearance of a dense cream, OP 1 is added to the ink to remove gloss and brightness.

USE:

OP 1 must be added with care at 5% - 15%. Too much OP 1 will make the ink become grainy, and can negatively impact the ink's printability, adhesion and mechanical resistance.

PACKAGE:

MATT PASTE OP 1 is available in 1 kg. can

LEVELLING LL

CHARACTERISTICS:

Levelling LL is a liquid additive formulated to improve the ink's ability to flow and spread. Normally added to reduced the "orange peel" effect it is useful for helping to remove air that has become incorporated with the ink through mixing or by the ink's reaction with catalysts.

USE:

LL is added at 0,5% - 1% maximum. Excessive addition of LL will negatively influence the ink's printability and adhesion.

PACKAGE:

LEVELLING LL is available in 1 lt. tin

ANTISTATIC LA

CHARACTERISTICS:

Antistatic LA is a paste with a retarding effect on ink drying. Appearing as a fluid cream, Antistatic LA is added to the ink to reduce "spiderwebs" or thin ink filaments that are created by electrostatic charges between the surface of the transfer pad and the substrate being printed.

USE:

Antistatic LA should be carefully blended with another thinner due to its retarding capacity, at 5% - 20% as required by working conditions. Never use it alone.

PACKAGE:

ANTISTATIC LA is available in 1 kg. can

ANTISILIKON LS

CHARACTERISTICS:

Antisilicone LS is a liquid additive, formulated to improve the ink's distribution. It is useful in obtaining a sharper image when using pads containing a high percentage of silicone oil, and for eliminating "set off" between freshly printed parts by creating a thin surface veil.

USE:

Antisilicone LS is added at 0,5% - 1% maximum. Excessive amounts of LS will result in problems with the ink's printability, adhesion to substrates and / or intercoat adhesion between subsequent colours or on painted surfaces.

PACKAGE:

ANTISILIKON LS is available in 1 lt. tin

THICKENING AD

CHARACTERISTICS:

Thickening AD is an extremely light powder formulated to thicken inks that are otherwise too fluid to print.

USE:

Thickening AD is added at 1% - 5%. Excessive amounts of AD will cause problems with the ink's transfer characteristics. When adding AD, go slowly, waiting a few minutes for the thickening action to take effect, as it is progressive rather than instantaneous.

PACKAGE:

THICKENING AD is available in 1 lt. tin

MEDIUM T88

CHARACTERISTICS:

Vehicle for vitrifiable inks. It is a substance that looks like oil, a result of a long research process, that allows to use vitrifiable enamel for glass and ceramic in pad printing process.

These enamels are powders, composed by high temperature resistant pigments and "glass frit", that is grinded glass, that melting at a temperature over 400°C, fixed themselves on the vitreous or ceramic surface. These powders unaccompanied are not usable in a pad printing process and to be picked up and released by the pad need a liquid vehicle, MEDIUM T88.

USE:

It is used mixing the MEDIUM T88 to the powder enamel in a varying ratio depending from the enamel type and the surface to decor. The most used mixing ratio are: 4 MEDIUM T88 portions with 6 enamel portion, or 3 MEDIUM T88 portions with 7 enamel portion. The obtained mixture can be used pure or diluted with the right thinner for MEDIUM T88.

Once put into the oven, MEDIUM T88 burns completely without leave residual and without influence the enamel result.

PACKAGE:

MEDIUM T88 is available in 1 kg. and 5 kg. can

THINNER FOR MEDIUM T88

CHARACTERISTICS:

Specific thinner for MEDIUM T88. Formulated to dissolve correctly the resins of this particular MEDIUM, it improves the fluidity and the pad pick up. Its basic characteristic is to burn completely when put into the oven for vitrification, without leave residual and without influence the enamel result.

USE:

It is added to the mixture MEDIUM T88/enamel in a varying ratio from 5% to 20%, depending on working conditions.

PACKAGE:

THINNER FOR MEDIUM T88 is available in 5 kg. can

CATALYST C1

CHARACTERISTICS:

C1 is a basic aromatic catalyst. It is the universal catalyst for all TOSH inks, excluding STM. It is used to increase adhesion and to improve mechanical and chemical durability. C1 reacts with the ink independent of solvent evaporation, effectively polymerizing the printed ink film over time.

USE:

C1 is added to ink in varying ratios from 1% to 5% depending upon the specific ink used. For example, it is added at 10% by weight to STE, STV, STX and STG, 25% to STB, and 50% to STD inks.

PACKAGE:

CATALYST C1 is available in 150 ml. tube and 0,5 kg. can

CATALYST C2

CHARACTERISTICS:

C2 is an amino type catalyst, specifically for use with STM ink. It is used to increase adhesion and to improve mechanical and chemical durability. C2 reacts with the ink independent of solvent evaporation, effectively polymerizing the printed ink film over time.

USE:

C2 is added to STM ink in a fixed ratio of 5% by weight.

PACKAGE:

CATALYST C2 is available in 0,2 kg. can

CATALYST C1N

CHARACTERISTICS:

C1N is an aliphatic type catalyst, used as an alternative to C1 for all TOSH pad printing inks except STM. Having the same utilization as C1, C1N has a slightly different chemical composition, reacting more slowly with the ink, and resulting in a more elastic dried ink film. As a result, it is more suitable for use on substrates that are more flexible, and for preserving colours that are exposed to high amounts of light.

USE:

C1N is added to ink in varying ratios from 10% to 50%, depending upon the specific ink used. For example, it is added at 10% by weight to STE, STV, STX and STG, 25% to STB, and 50% to STD inks.

PACKAGE:

CATALYST C1N is available in 0,5 kg. can

METALLIC PIGMENTS IN PASTE PO AND PA SERIES

CHARACTERISTICS:

They are pastes constituted by grinding metallic pigments that have been wetted with thinner to avoid volatility. They must be mixed with transparent base and cut pastes to create metallic shades as stated on the TOSH colour chart.

The normal mixing ratio is 4 parts ink transparent base to 1 part metallic paste. Before mixing the paste with ink it is recommended that you add thinner to the paste to make it more fluid and to aid in dispersion with the transparent base. If you add too much thinner you can add cut paste to increase viscosity / density.

USE:

Indicative mixing ratio is 2 parts transparent base, 2 parts cut paste and 1 part metallic base.

To increase opacity, the ratio of ink to metallic paste may be increased to 3:1.

To increase gloss, the ratio can be increased to 5:1.

PACKAGE:

METALLIC PIGMENTS IN PASTE PO AND PA SERIES are available in 0,5 kg. and 1 kg. can

PO 400 PALE GOLD PASTE

Paste compounded by grinded metallic pigment, wetted with thinner to avoid the volatility. This pale gold shade shows the colour with cold reflections, greenish.

PO 410 RICH GOLD PASTE

Paste compounded by grinded metallic pigment, wetted with thinner to avoid the volatility. This rich gold shade shows the colour with warm reflections, definitely yellow.

PO 420 BRONZE IN PASTE

Paste compounded by grinded metallic pigment, wetted with thinner to avoid the volatility. This bronze shade shows the colour with warm reflections, predominantly red.

PA 500 SILVER IN PASTE

Paste compounded by grinded metallic pigment, wetted with thinner to avoid the volatility. This aluminium shade shows the colour with neutral reflections, predominantly silver, characterized by a thin grind.

PA 505 SILVER IN PASTE

Paste compounded by grinded metallic pigment, wetted with thinner to avoid the volatility. This aluminium shade shows the colour with neutral reflections, predominantly silver, characterized by a thicker grind respect to PA 500.

PA 510 SILVER WX IN SUSPENSION

Paste compounded by laminated metallic pigment, thinly minced, wetted with thinner to avoid the volatility. This aluminium shade shows the colour with very bright silver reflections, characterized by an excellent brilliance.