

INSTRUCTION FOR USE OF Nikkalite™ N3600 SERIES INKS

NPTSD118

Nikkalite™ N3600 Series Process Colours are two pack screening inks developed for **Pre-Screening** and **Post-Screening** on all **Nikkalite™** ENCLOSED LENS type retroreflective sheeting **EXCEPT** Promotional Grade (MPG). These inks may also be **Pre-Screened ONLY** on **Nikkalite Crystal™** grade, **Nikkalite™** Ultralite Grade (ULG) and Ultralite Special Grade (ULS) encapsulated lens type retroreflective sheeting. **Nikkalite™** N3600 two pack ink is extremely durable, highly transparent, quick drying

and fast curing inks, that bond strongly and permanently to **Nikkalite™** retroreflective sheeting. This ink creates a "vandal-proof" sign when screened on enclosed lens type sheetings. It is not, however, "vandal-proof" when screened on ULS and ULG sheeting. Clear coating is not normally required for either ink, however, if it is specified use the appropriate N3612 clear toner on the printed N3600 series ink.

MIXING OF INK AND HARDENER:

These inks must be mixed with **Nikkalite™** N3631 Hardener. The small can of hardener is to be mixed THOROUGHLY with the larger can of ink by hand mixing for 100 revolutions, or with an electric mixer with an EXPLOSION-PROOF motor for one minute. When mixing smaller quantities of ink and hardener, **8 parts by weight of hardener with 100 parts of ink** shall be mixed as above. THE INK AND HARDENER MIXTURE MUST BE USED WITHIN 6 HOURS

OF MIXING. Normally, **Nikkalite™** ink does not require dilution with thinner due to its pre-adjusted viscosity. However, when it is necessary, use only **Nikkalite™** thinners. Mixing ratio of inks and thinner is 100 parts ink and up to 10 parts thinner as necessary.

CAUTION: The sparks from an ordinary motor may ignite the solvents in the ink and hardener.

SCREENING:

When screen printing Road Traffic Signs a 62T-77T/cm (157-180/in.) polyester mono-filament plain weave mesh is recommended to achieve the correct depth of colour and the durability required. Block-out masking media must be water-soluble material, not solvent soluble. An off-contact printing method is recommended. If an automatic machine is not used, BE SURE TO RUN A FILL (OR FLOOD) PASS over the screen IMMEDIATELY

AFTER the impression pass is made and before the screened sign is replaced with the next sheeting to be screened. In this way the screen can be kept "wet" at all times to prevent drying of the ink and blocking the screen. Do not print **Nikkalite™** N3600 series ink onto any other series inks or vice versa. When screen printing with other manufacturer's ink, thinner, etc. onto **Nikkalite™** sheeting, the user must accept all responsibility.

Drying:

Important: Set the fans at 1.5 to 2 meters apart from the drying racks and let them blow slightly downwards over the surface of the screened signs. IMMEDIATELY AFTER SCREENING, place each sign in the rack forcing air across them for approximately 30 minutes with the fans set to "HIGH". In case of UL pre-screened sign faces, the open area between the shelves should be at least 10cm (4") so that adequate air can go through. If they are narrower, then use every other shelf. There is a possibility that insufficient air volume will cause fine cracks on the UL sheeting. When use a heating system dryer, we recommend an oven dryer

with controls for temperature, wind velocity and volume, sent and exhausted. Do not use baking type oven (only heating without circulation). PRE-SCREENED SIGN FACES OF UL SHEETING DO NOT REQUIRE AN OVEN DRYER. After drying according to the following manner, check the screened surface for thorough drying. Put two pieces of screened signs together, face to face, firmly press them for 5 seconds. Peel them off close to your ear and if you hear any peeling sound, then drying is incomplete. Continue airflow until no sound is heard.

A. Natural drying: In case of 24°C (74° F), RH 50-60%
Tack-free: 15 to 30 minutes under electric fans
Screening 2nd colour: 3-4 hours
Ready for packing: after 24 hours in ventilated room from being tack-free

B. Oven drying:
60°C to 70°C (140° F to 158° F) X 1 hour in the oven
Ready for packing: After cooling down at room temperature
In case of UL: Max. 40°C (104° F) X 4 hours in the oven.

Packing:

Screen printed **Nikkalite™** finished signs must be protected with slip sheet and foam padding. Be sure that the shiny, waxy side is

placed against the screened surface. Avoid banding tightly, or stacking which allows signs or faces to be under pressure.

STORAGE:

Nikkalite™ N3600 Series inks and its hardener should be stored in tightly sealed containers between 15°C to 25°C (59° F to 77° F),

RH 30% to 60% ideally and out of direct sunlight.

CAUTION:

IF ANY INK, HARDENER OR THINNER SHOULD GET INTO THE

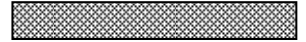
EYES, WASH IMMEDIATELY WITH CLEAN WATER AND SEEK

MEDICAL ATTENTION. WHEN EXPOSED TO THE SKIN, WIPE
OFF WITH A CLOTH OR PAPER TOWEL AND WASH THE SKIN

WITH A MILD DETERGENT. SEE A DOCTOR IF INFLAMMATION
SHOULD TAKE PLACE.



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