

NTS 4400

Type

Glossy two component ink, to be used on retroreflective materials.

Application

Printed on retro-reflective foils, the New Traffic Sign 4400 ink series is very weather resistant and has a high light fastness. Varnishing this ink will not increase its weather resistance or light fastness but can increase mechanical resistance. When used with 61-100 T mesh, these inks have the right colors and transparency to meet international requirements

Drying

Drying takes place by evaporation of the solvents. The chemical reaction between the two components starts only after drying. At a temperature of 20 °C, the ink is dust-dry after 6-8 hours and hand dry after 8-12 hours. With temperatures below 18 °C, drying time is slowed down considerably.

When tunnel dried, the drying time is dependent on the tunnel temperature, fineness of the gauze, type of thinner, qualities of the material to be printed etc. The optimum proportion of temperature-conveyor belt speed must be found through experience. A guideline is: 60 seconds in a drying tunnel with a good air circulation at 60 C°. Printed foils must then dry completely in a drying rack.

When the films are only dried in drying racks, they must be force dried using heat fans. The space must be well-ventilated to prevent saturation of the air with solvents. Otherwise, drying time will be slowed down considerably.

The time it takes for it to be possible to pile up the printed materials is dependent on the thinner added, type of mesh used, surrounding temperature, ventilation etc. When working in afore-mentioned conditions, piling up is possible after approximately 12 hours.

Adhesion

Adhesion can be determined only after the reaction between the components has fully taken place. This usually takes around 48-72 hours.

Chemical resistance

NTS 4400 inks and varnishes are resistant to alcohols, detergents, soap, hydraulic and mineral oils, kerosene and sea water. The inks are not as resistant to aggressive aromatic substances and ketones, chlorinated hydrogens, acids and lyes.

Light fastness and weather resistance

NTS 4400 inks have a good light fastness. Extension if inks using NTS 4449 Clear or NTS 4401 EO White reduces the light fastness. Extensions > 50% are not recommended. The inks are weather resistant.

Elasticity

The NTS 4400 inks are very elastic and can withstand shrinking and stretching of the printed materials, which may occur due to temperature changes.

Hardener

Before adding a hardener, the ink must be stirred well before use.

Add 25% of **Hardener no. 3** to weighed amounts of ink/varnish from this series. After adding a hardener and mixing it in, thinners or retarders may be added.

Thinners

For machine printing, add 5-10% of **Thinner 61**. For hand printing, add 5-10% of **Retarder 4** or a mixture of thinner and retarder. This is also suitable for printing of fine details or printing in high surrounding temperatures.

Ink usage

When using 25% Hardener no.3 and 15% thinner with a 100-40 T mesh: ca. 45-50 m²/ltr

Potlife

At 20 °C, the potlife of a ink-hardener mix is around 8-12 hours. At lower temperatures, the potlife will be longer, provided that the container is closed properly and the ink is stored in a dry place.

Mesh and films

Best results will be achieved using 100-40 T mesh. All direct, indirect and capillary films for solvent-based inks can be used.

When using a 77-55 T mesh, colors need to be extended using 30% Clear, to achieve a color and retro-reflection similar to prints printed using 100-40 T mesh. Keep in mind that the thicker layer of ink will take longer to dry.

Mesh cleaning

Mesh needs to be cleaned immediately after printing, use **Screenwash LOD** or **Screenwash GA**.

Test printing

Please, continually make test prints before moving on to printing the complete order.

This technical information is meant to be a guideline. Even though the information is given after detailed examination and to the best of our knowledge, AGA Color Solutions Europe b.v. can take no responsibility for it.

visprox NTS 4400



01 White L



02 Black M



92 Blue
(± pms 300C)



93 Dark Blue
(± pms 286C)



94 Green
(± pms 2627C)



95 Orange
(± pms 158C)



4496 Red
(± pms 185C)



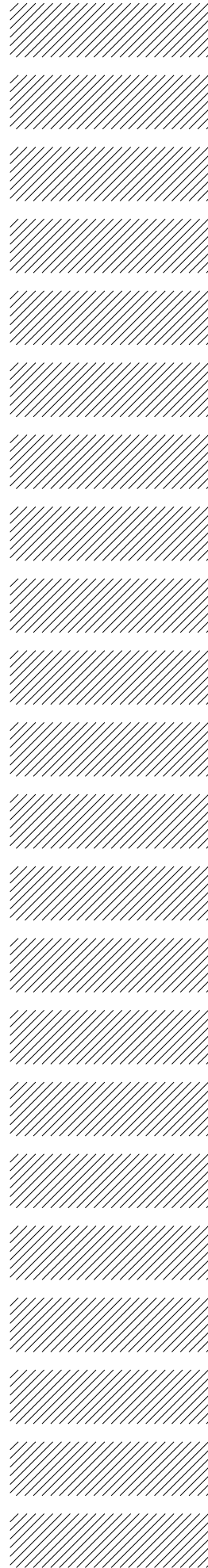
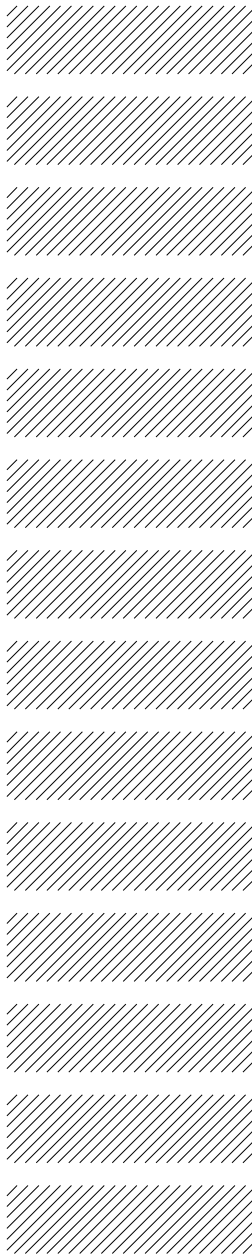
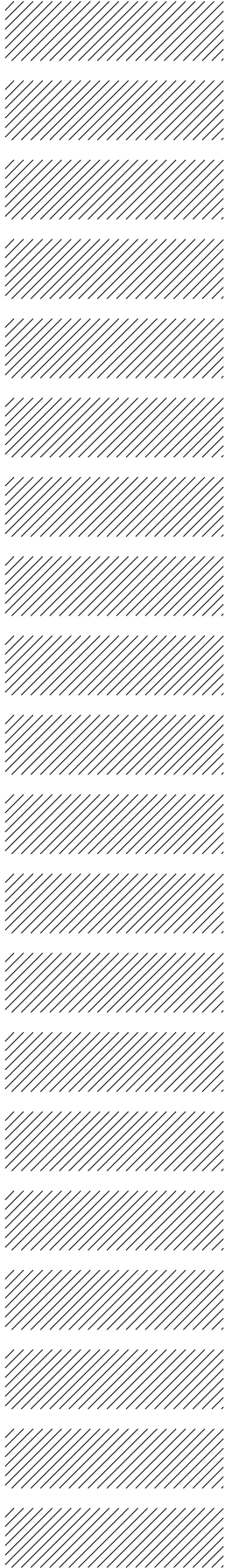
4497 Yellow
(± pms 116C)



4498 Dark Red
(± pms 186C)



4499 Brown
(± pms 160C)



The PMS references are an approximation when printed using 100T mesh. Type of mesh, degree of dilution and type of light can affect the results.