

Description

The ORALITE® - Screen printing ink Series 5010 is a solventbased, quick-curing two-component system with a glossy, highly weatherproof surface after curing, which is resistant to all common detergents, solvents and chemicals.

Area of use

The ORALITE® - Screen printing ink was especially developed for printing on ORALITE® reflective films the front material of which is made of alkyd resin. Printings on ORALITE® reflective films of the Series 5710, 5700, 5500 of colour 010 (white) are suitable for the manufacture of traffic signs.

Supplying assortment

Range of colours:	The following glazing colours are available: ORALITE® - screen printing ink 5010-020 yellow ORALITE® - screen printing ink 5010-030 red ORALITE® - screen printing ink 5010-035 orange ORALITE® - screen printing ink 5010-050 blue ORALITE® - screen printing ink 5010-060 green ORALITE® - screen printing ink 5010-080 brown ORALITE® - screen printing ink 5010-070 black is opaque.
Auxiliary equipment	Curing agent H5010 (delivery lot 150g) A lot contains 630g screen printing ink and 150g curing agent. Except for the addition of the curing agent, all seven colours are ready for use.
Attention	The curing agent H5010 is sensitive to moisture and has always to be kept in sealed tubes.

Processing and handling instructions

Ratio of mixture	Before printing, the curing agent H5010 is to be added to the ORALITE® - screen printing ink 5010 observing the specified ratio of mixture of (4.2 : 1, ink : curing agent). This ratio is achieved by mixing the lots of ORALITE® - screen printing ink (630g) with the curing agent H5010 (150g). After thoroughly mixing and a relaxation time of about 10 minutes allowing air bubbles to escape, the screen printing ink is ready for use. At a room temperature of 20°C the potlife of the ready-for-use screen printing ink is 8 hours.
Serigraph stencils	Only wire mesh cloth made of polyester quality of mesh number 61-64 (mesh 1:1) should be used for manufacturing stencils for screen printing.

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Processing instructions Observing the specified ratios of mixture and using the recommended stencils guarantees a compliance of the colour prints on ORALITE® reflective films of the colour 010 (white) with the international specifications for colours at daylight. In addition to this, the colour prints on ORALITE® reflective films Series 5710, 5700 and 5500 of the colour 010 (white) meet the international specifications for reflective materials of this class, as far as their minimum reflective data is concerned.

Preparation for printing The stencil for screen printing and the squeegees (flood coater and blade) have to be cleaned with a suitable purifier.
Every sheet of film shall be cleaned with an anti-dust cloth.

Drying As soon as the solvent evaporates, the ink coat starts curing. The following standards should be observed for drying:

Drying grade	Temperature	Time
overprintable	20°C	30 min
	60°C	6 min
stackable (in small stacks (10 cm max.))	20°C	5 h
	60°C	45 min
cured	20°C	8 d

The drying periods specified very much depend on the room temperature, the air humidity and the drying conditions. Using a drying rack a good air circulation is required within the first 30 min.

The minimum processing and curing temperature must be 15°C.

After curing properly, the ink coat is highly weatherproof and resistant to chemicals and mechanical stress. A transparent coating is not necessary.

Multicolour printing For overlapping multicolour printing it has to be observed that the bottom ink layer is not chemically cured and the overprint can easily set on it as a result of the partial solution of the bottom layer. That is realised if there pass less than 12 hour between the printings.

Marking For the ORALITE® - screen printing inks series 5010 and curing agent H5010, current safety data sheets complying with the EU Specifications 91/155 and containing information about all safety-related data, inclusive the marking procedures in accordance with the current specifications for hazardous materials and the EU specifications are available. The labels also contain the markings.

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