

Product Description

The ORALITE® 5010 Screen Printing Ink is a solvent based, 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® 5010 Screen Printing Ink was developed especially for printing on ORALITE® reflective films with a front material made of alkyd resin, acrylic film or top coated polyester for printing. Printings on ORALITE® reflective films of the series 5810, 5800, 5710, 5700, 5500 and 5300 of colour white (010) are suitable for the manufacture of traffic signs.

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 (opaque)

Auxiliary Equipment: Curing agent H5010 (delivery lot 150 g).
A lot contains 630 g screen printing ink and 150 g curing agent. Except for the addition of 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 observing the specified ration of mixture of (4.2 : 1 : curing agent). This ratio is achieved by mixing the lots of ORALITE® 5010 Screen Printing Ink (630 g) with the curing agent H5010 (150 g). 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° the pot-life 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.

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 white (010) with the international specifications for colours at daylight. In addition to this, the colour prints on ORALITE® reflective films series 5810, 5800, 5840, 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 coats 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 of max 10 cm)	20° C	5 h
	60° C	45 min
Cured	20° C	8 days

The drying periods specified very much depend on the room temperature, the air humidity and the drying conditions. If using a drying rack, a good air circulation is required during 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 must 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 hours 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 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.

The statements in this information sheet are based upon our knowledge and practical experience. The data is intended only as a source of information and is given without guarantee and does not constitute a warranty. Due to the wide variety of possible uses and applications, customers should independently determine the suitability of this material for their specific purpose prior to use.

IMPORTANT NOTICE

When using ORALITE® sheeting the relevant national specifications have to be complied with. ORAFOL recommends you obtain the current requirements from your local authority and ensure product conformance with such requirements. Please contact ORAFOL for further information.

All ORALITE® products are subject to careful quality control throughout the manufacturing process and are warranted to be of merchantable quality and free from manufacturing defects. Published information concerning ORALITE® products is based upon research which the Company believes to be reliable although such information does not constitute a warranty. Because of the variety of uses of ORALITE® products and the continuing development of new applications, the purchaser should carefully consider the suitability and performance of the product for each intended use, and the purchaser shall assume all risks regarding such use. All specifications are subject to change without prior notice.

No warranty is given for purposes other than those listed in the Technical Datasheet or which are not processed according to ORAFOL's processing and handling instructions. The durability of the signs will depend on a variety of factors, including but not limited to substrate selection and preparation, compliance with recommended application guidelines, geographic area, exposure conditions and maintenance of the product and finished sign. Sign failures caused by the substrate or improper surface preparations are not the responsibility of ORAFOL. Please refer to the full warranty document available at www.orafol.com for detailed information.

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