

# Product Data Sheet

## Pad Printing Ink

**SunChemical®**  
Coates Screen Inks

# LAB-N 111774

## Solvent Based Pad Printing Ink Range, 1-Component

### APPLICATION

Special pad printing inks for application of reversible marking prints on spectacles (e.g. fitting etc.).  
To remove LAB-N 111774 prints use thinner VD10.

### PROPERTIES

- Ink range LAB-N 111774 is a solvent based 1-component pad printing ink series.
- LAB-N 111774 inks are physically quick drying inks. They result in a satin-gloss finish.
- LAB-N 111774 prints are not resistant to hand sweat. Printed spectacles should be handled with care to avoid smearing of prints.
- LAB-N 111774 shows a good, easy and reliable printability.
- Ink range LAB-N 111774 is not suitable for outdoor applications.
- Note: Because of the variety of different types of spectacles and various coatings on the glass surfaces, pre-tests to determine suitability are essential.

### COLOUR SHADES - OVERVIEW

- Opaque: Standard Colour shades with medium to good opacity.
- Special colour shades are available upon request.
- More information about available colour shades in the detailed tables in section Colour Shades.

### CHOICE OF PIGMENTS AND LIGHT FASTNESS

Colour shades of LAB-N 111774 ink range contain pigments with a high light fastness. Light fastness and weather resistance will reduce if thinner layers are applied or if base colours are mixed with a high ratio of white or varnish.

Pad ink range LAB-N 111774 is not suitable for outdoor applications.

### ADJUSTMENT FOR PAD PRINTING

- Pad printing inks LAB-N 111774 are not supplied in a ready-to-print adjustment.
- The ink is adjusted for printing by addition of thinner or retarder (stir with mixer, agitator).
- Prior to printing, the inks should be stirred well to obtain a homogeneous dispersion of all ingredients.

### THINNERS / RETARDERS

Depending on local conditions, the ink is adjusted for printing by addition of 10 to 20% by weight thinner or retarder.

**Generally, the thinner suitable for LAB-N 111774 is VD 10!**

The additional products listed below should only be used if the required printing quality/ink transfer cannot be achieved using VD 10 (e.g. drying too slow or too fast).

For adjustment of pad inks LAB-N 111774, the following products are available:

<b>Thinner:</b>	<input checked="" type="checkbox"/> <b>VD 10</b>	<b>Standard thinner, mild</b>
<b>Retarder:</b>	<input type="checkbox"/> TPD	Very slow retarder
■= Preferred    ○= If required		

Depending on printing conditions, the products listed above can be mixed into the inks individually or as mixtures. Please note that depending on evaporation rate of the thinner/retarder used drying times may be longer.

Thinner/retarder should be mixed into the ink thoroughly using a mixer or agitator. In addition, inks should be stirred well prior to each processing to obtain a homogeneous dispersion of all ingredients.

#### ADDITIONAL AUXILIARY AGENTS

Application	Product	Addition in % by weight	Additional Information
Viscosity increase	Thickening powder	Max. 3%	Stir with mixer
Matting	Matting powder	Max. 5%	Stir with mixer
Flow agent	VM 1	1 - 5%	Do not overdose!

#### OVERPRINTING

LAB-N 111774 inks are not designed for overprinting.

#### DRYING

LAB-N 111774 pad printing inks dry physically, i.e. by evaporation of solvents.

Drying times below are only approximate as drying properties depend on various factors:

- Type and amount of thinners/retarders used.
- Thickness of printed ink layer (single print, multiple prints)
- Drying temperature.

Drying time is approx. 2 - 3 minutes at room temperature (20 – 25°). Drying time with heat application (e.g. hot air fan) and air circulation is about 20 – 30 seconds.

Complete drying may take up to 15 minutes, also depending on the substrate.

#### Resistance Tests

Resistances should not be checked before the prints are completely dry.

#### CLICHÉ

All commercial types of clichés (polymer, thin and thick steel, ceramic) are suitable for processing LAB-N 111774 inks.

Note: Standard shades 17, 50 and 51 cannot be used for closed ink systems with a magnet holder as they contain pigments with iron oxide content.

#### CLEANING

Clichés, ink pots and tools can be cleaned with our universal cleaning agents URS, URS 3 or thinner VD 40.

#### PACK SIZE

Pad printing inks LAB-N 111774 are delivered in 1 litre containers. Other pack sizes are available upon request.

#### SHELF LIFE

In closed original containers, LAB-N 111774 inks generally have a shelf life of 2 years from date of production. For exact date of expiry, please refer to the label.

#### SAFETY DATA SHEETS

Read safety data sheet prior to processing

Safety data sheets comply with Regulation (EC) No. 1907/2006 (REACH), Appendix II.

**CLASSIFICATION AND LABELLING**

Hazard classification and labelling comply with Regulation (EC) No. 1272/2008 (CLP/GHS).

**CONFORMITY**

Coates Screen Inks GmbH does not use any of the substances or mixtures for the production of printing inks, which are banned according to the EUPIA (European Association of the Printing Inks Industry) exclusion policy. Further compliance confirmations are available upon request.

**ADDITIONAL INFORMATION ABOUT OUR PRODUCTS**

Product data sheets: Auxiliary Agents for Pad Printing HM  
 Brochures: Pad Printing Inks  
 Internet: Various technical articles are available for download on [www.coates.de](http://www.coates.de), section "SN-Online"

**COLOUR SHADES**

<b>STANDARD Colour Range (medium opacity)</b> According to colour card STANDARD 1 for pad printing inks or TP 247/ TP 272/ ... Availability of further standard shades upon request			
medium yellow	LAB-N 111774/11-NT	medium blue	LAB-N 111774/31NT
dark yellow	LAB-N 111774/12-NT	dark blue	LAB-N 111774/33-NT

Matching of PMS, RAL, NCS colours and special shades upon request.

*The statements in our product and safety data sheets are based on our present experiences, however they are no assurance of product properties and do not justify a contractual legal relationship. We provide these details to inform customers about our products and their possible applications. However, on account of various factors influencing processing of our products it is absolutely essential to carry out printing trials under local production conditions. Choice of individual ink types and their suitability for the intended application is the sole and entire responsibility of the user. We do not assume any liability for any problems of technical or process-related nature. Any liability shall be limited to the value of the goods delivered by us and processed by the user.*

*All former product data sheets are no longer valid.*

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