

Product Data Sheet

Pad Printing Ink

SunChemical®
Coates Screen Inks

TP/UV-L & TP/UV-454060

UV-Curing Special Pad Printing Inks, 1-Component

APPLICATION

Special pad printing inks TP/UV-L and TP/UV-454060 are used in industrial applications for printing on polyamide (PA), duroplastics, pre-treated polyolefines (PE and PE) and metals.

PROPERTIES

- TP/UV-L and TP/UV-454060 are both 1-component systems. They cure by UV-radiation (radical).
- Varnish TP/UV-L 70/03 and black TP/UV-454060 do not contain organic solvents. For technical reasons silver TP/UV-L 79/02 contains solvents.
- TP/UV-L and TP/UV-454060 are highly resistant against solvents and water.
- Note: Because of the variety of substrates, pre-tests are essential. It is also advised to check efficiency of possibly required pre-treatment of substrates (cleaning/degreasing, flame/corona/plasma treatment) or maybe even post-treatment (flame-drying). Also check efficiency of UV-radiation

COLOUR SHADES - OVERVIEW

- 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

Choice of pigments and matching of colour shades according to customer requirements.
Due to binder base both systems are suitable for medium-term outdoor applications.

ADJUSTMENT FOR PAD PRINTING

- Pad printing inks TP/UV-L and TP/UV-454060 are supplied in a ready-to-print adjustment.
- Prior to printing, the inks should be stirred well to obtain a homogeneous dispersion of all ingredients.

THINNERS / RETARDERS

Not necessary, only use after checking with Coates Screen Inks GmbH, laboratory pad printing.

ADDITIONAL AUXILIARY AGENTS

Not necessary, only use after checking with Coates Screen Inks GmbH, laboratory pad printing.

OVERPRINTING

Not necessary, only use after checking with Coates Screen Inks GmbH, laboratory pad printing.

BRONZE COLOURS, MIXING OF BRONZE INKS

Bronze colours are available upon request.

DRYING / UV-CURING

- TP/UV-L and TP/UV-454060 inks only dry/cure under UV-radiation.
- Suitable UV-driers with Hg medium-pressure lamps (250 – 400 nm) and an efficiency between 80 and 400 W/cm have to be used.
- Preferably, use reflectors with a focussed radiation.
- Ensure an even radiation (intensity/distance to the lamps) of the whole printed image.
- TP/UV-L and TP/UV-454060 inks cure with an energy of approx. 2000 mJ/cm² (measured with Kühnast UV-integrator).
- The UV-energy required depends on the thickness of the printed ink layer, colour shade and type of substrate. Hence, printers should determine the exact required energy with their own UV-drier.

Resistance Tests

Resistances should not be checked before completion of curing and cross-linkage. A waiting time of up to 24 hours after UV-curing may be required.

CLICHÉ

All commercial types of clichés (polymer, thin and thick steel, ceramic) are suitable for processing TP/UV-L and TP/UV-454060 inks. Use clichés with a depth of 15µ.

CLEANING

If not exposed to UV-radiation 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 TP/UV-L and TP/UV-454060 are delivered in 1 litre containers. Other pack sizes are available upon request.

SHELF LIFE

In closed original containers, TP/UV-L and TP/UV-454060 inks generally have a shelf life of 1 year 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

Brochures: Pad Printing Inks

Internet: Various technical articles are available for download on www.coates.de, section "SN-Online"

COLOUR SHADES

AVAILABLE COLOUR SHADES			
Availability of further colour shades upon request			
silver	TP/UV-L 79/02	black	TP/UV-454060
varnish	TP/UV-L 70/03		

Matching of special shades upon request.

In some individual cases the product characteristics of special colour shades and modifications of this ink type manufactured upon customer request may differ from the above properties.

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.

January 2021 - Version B2

Coates Screen Inks GmbH
 Wiederholdplatz 1 90451 Nürnberg
 Tel.: 0911 6422 0 Fax: 0911 6422 200
<http://www.coates.de>