

Proell KG's core business lies in the development of custom-made chemical products for coating/decorating plastics and other materials, as well as innovative ink systems for IMD/FIM technology, and screen and pad printing inks.

**Product News****1. Norilux® DC**

Norilux® DC is a formable, abrasion and chemically resistant Dual Cure screen printing lacquer. Norilux® DC can be used as protective lacquer or hard coat on PC, PMMA, ABS and PP films. Norilux® DC is ideally suited for first surface coating/protection of products manufactured in IMD/FIM technology.

The glossy version of the dual cure lacquer can be printed on textured film surfaces to produce abrasion resistant and transparent display windows.

The matt version of Norilux® DC can be printed on uncured transparent hard coat films such as Makrofol® HF 278 or 312 to create matt and high gloss effects in one item.

Besides the high glossy Norilux® DC lacquer, various satin gloss, textured and matt grades as well as pigmented and UV stabilized versions are available.

Tactile surface structures e.g. brush effects and 3D patterns can be printed with the highly resistant lacquer.

The lacquer can be used for overprinting silicone-free UV, solvent and water-based screen printing inks as well.

Norilux® DC dries by evaporation of the solvents in jet dryers. Films decorated with Norilux® DC can be 3D formed after box oven drying e.g. by high pressure forming or thermo forming. Afterwards, the formed films must be UV cured. The cured lacquer layer shows excellent resistances to abrasion, chemicals and cleaning agents and passes various creme tests of the automobile industry.

In automotive interior, center stacks, touch panels and decorative trims are first surface protected with Norilux® DC.

Even mobile phone covers and sanitary panels are overprinted with the highly resistant lacquer. Second surface decoration is printed with the IMD/FIM ink system NORIPHAN® HTR N.



Picture 1: Decorative brush effect, printed with Norilux® DC on a PC film. Second surface decoration was printed with the IMD/FIM ink system NORIPHAN® HTR N.

## **2. NoriPress® PP – Adhesion Promoter for PP-IMD/FIM**

NoriPress® PP is an adhesion promoter for IMD/FIM technology (Film Insert Molding) which makes back molding of second surface screen printed PP films with polypropylen injection molding material possible.

Up to now, back molding of PP film laminates was possible only.

For decorating corona pre-treated PP films, the IMD/FIM screen printing inks NORIPHAN® XWR and NoriPET® are best suited. The printed film shows excellent cohesion in compound values when back molding with Daplen® EE 158 AI (Borealis).

Automotive decorative parts and panels as well as motorcycle fairings and tool housings can be produced in durable quality by using the PP IMD/FIM process.



Pictures 2: Motorcycle fairings are a potential PP IMD/FIM application

## **3. Nori® Protect XCP**

Nori® Protect XCP is a glossy, solvent-based and weather resistant two-component screen printing protective lacquer showing good chemical and mechanical resistances.

Nori® Protect XCP is suitable for printing on polycarbonate, rigid PVC, polystyrene, ABS and SAN, pre-treated PET films and corona-treated polyolefins (PE and PP) as well as for metal und aluminum.

Decorated surfaces can be overprinted resp. protected with Nori® Protect XCP. The ink layer is formable on suitable substrates.

The lacquer has been formulated user-friendly in terms of ingredients and is free of aromates cyclohexanone and phthalates.

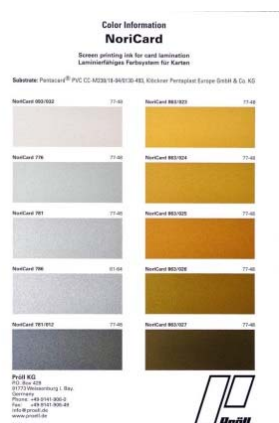
## **4. NoriCard LSI**

NoriCard LSI is a solvent-based screen printing ink for printing on PVC core films used in card manufacturing.

NoriCard LSI shows excellent laminating properties with uncoated PVC overlay films at a temperature of 140 °C (285 °F) and provides good peel strength values.

The NoriCard LSI metallic ink system includes various gold and silver colors of different pigment particle sizes (from fine, middle-coarse and coarse).

The user-friendly formulated ink is free of aromatic solvents and cyclohexanone.



Pictures 3: NoriCard LSI Color Info

## 5. NoriCure® CCI LED

NoriCure® CCI LED is a new UV-LED curing screen printing ink developed for the manufacture of plastic cards. The ink is suitable for printing on PVC and PETG core films and subsequent lamination process.

NoriCure® CCI LED shows excellent laminating properties and good peel strength with PVC overlay films at temperatures greater than 140 °C (284 °F).

Various color shades, metallic and effect colors are available from stock.



Picture 4: NoriCure® CCI LED Effect Colors

## 6. Aqua-Jet® WT

Aqua-Jet® WT is a water-based screen printing ink for printing on wood and plastics (only after pretests!) for indoor application, especially for wooden toys.

The environmentally compatible and user-friendly ink system shows good printing properties and a high gloss finish. Aqua-Jet® WT is free of aromatic solvents, cyclohexanone, NMP, PVC, phthalates and organotin compounds.



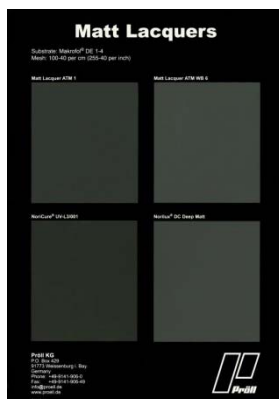
Picture 5: Aqua-Jet® WT printed on wooden toys

## 7. Matt Lacquer ATM WB 6

Matt Lacquer ATM WB 6 is an amended water-based, UV-stabilized and formable matt lacquer system for overprinting polycarbonate film instrument gauges (speedometer panels). Printed films are excellent deep-drawable by vacuum or high pressure forming. The matt lacquer can be used as well for matting high gloss films made of PC, pre-treated PET and rigid PVC. The screen printed deep matt lacquer surface has a soft grip and shows good scratch and chemical resistances.



Picture 6: Speedometer panels decorated with Matt Lacquer ATM WB 6



Picture 7: Color Info – Screen printing matt lacquers for 3D dials

Contact:  
 Proell KG  
 Stefan Zäh  
 Manager Marketing Communication  
 Phone: +49-9141-906-20

E-mail: [stefan.zaeh@proell.de](mailto:stefan.zaeh@proell.de)  
[www.proell.de](http://www.proell.de)