Norilux® DC is a formable, abrasion and chemical 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.

Versions

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

Processing

Norilux® DC dries by evaporation of the solvents in jet dryers. Before further processing of the printed films, it is necessary to remove nearly all solvent residues from the layer of lacquer and substrate. Well ventilated box ovens can be used.

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. Depending on the thickness of the lacquer layer, UV doses of 1200-2000 mJ/cm² are necessary (Kühnast UV-Integrator, UV 250 to 410 nm, max. 365 nm).

Resistances

The cured lacquer layer shows excellent resistances to abrasion, chemicals and cleaning agents and passes various creme tests of the automobile industry.

Norilux® DC applications

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.