Norilux® DC – formable, abrasion and chemical resistant protective lacquer

Norilux® DC is a formable, abrasion and chemical resistant dual-cure screen printing lacquer, which can be used as a protective lacquer or hard coat for first surface protection of products manufactured in IMD/FIM technology using PC, PMMA, ABS, and PP films.

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 matte version of Norilux® DC can be printed on uncured transparent hard coat films such as Makrofol® HF 312 to create matte and gloss effects on one printed film.

Besides the high gloss version, various satin gloss, textured and matte grades as well as pigmented and UV stabilized versions are available.

Tactile surface structures, such as brushed metal effects, 3D patterns, wood and stone designs can be printed with the highly resistant lacquer.

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

Processing

Norilux® DC must be dried in jet/tunnel dryers followed by box oven drying. Before further processing of the printed films, it is necessary to remove nearly all solvent residues from the layer of lacquer and substrate.

Films decorated with Norilux® DC can be 3D formed after the drying process by high pressure forming or thermoforming. Afterwards, the formed films must be UV cured. Depending on the thickness of the lacquer layer, UV doses of 1200–2000 mJ/cm^2 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.

Applications

Norilux® DC can be used for numerous applications including, but not limited to, center stacks, touch panels, and decorative trims in automotive interiors. Even mobile phone covers are overprinted with the highly resistant lacquer.