Technical Information

13.C.013 | Conventional Offset Systems | Coatings, Lacquers, Varnishes, Primers

PRINTLAC®

PRINTLAC® COFREE gloss mineral oil-free

10 L 9515

PRINTLAC COFREE gloss 10 L 9515 is a cobalt-free and mineral oil-free oil-based overprint varnish for being applied with a regular offset printing unit without any special technical features.

Application

PRINTLAC COFREE gloss 10 L 9515 is suitable for both wet-on-wet printing and offline varnishing in a second pass. It can be used either with or without fount solution.

In addition PRINTLAC COFREE gloss 10 L 9515 is required for returnable bottle labels. It is a varnish that gives the best possible protection to the label against damage to its surface. At the same time, easy permeability to lye should be assured so as to allow the labels to be removed during cleaning of the empty bottles.

This overprint varnish is formulated mineral oil-free, but is not of the "low-migration" type. It is not recommended for the manufacture of food packaging.

Properties

- Very good permeability to lye
- Mineral oil-free
- Very good gloss
- Fast setting
- Fast oxidative drying
- Very good pile behaviour
- Good rub resistance
- Low yellowing
- Certified and recommended for printing according Cradle-to-Cradle silver level

Strengths of print varnishes

- They guarantee spot varnishing true to register, for a budget price, without demanding special press equipment
- It is possible to coat light-weight papers with the substrate remaining dimensionally stable, because of the lowered water impact compared to water-based coatings
- Oil-based varnishes are so similar to offset printing inks, that they can be handled in the same way (including roller washes). Thanks to this fact, inks underneath don't need to possess particular fastnesses (for example resistance to nitro or alkalis)

Additional information

When using print varnishes, contact yellowing can't be completely excluded. This is due to volatile fission products arising during the drying process, which may deposit in the paper coating and lead to a chemical reaction with constituents of the paper coating. Despite all efforts to prevent the yellowing by a suitable ink formula, some coated papers tend to be more sensitive than others. Therefore we recommend using papers you know or you have tested. (See INKFORMATION 4 for test methods)

In contrast with water-based coatings and UV coating, print varnishes are comparatively slow-drying. The mechanism of oxidative drying, which produces stable coating films in print varnishes as a result of the cross-linking of fatty acid chains, can occupy several hours or even days, depending on the drying conditions. Drying can be accelerated by the use of IR radiators. However, pile temperatures of more than 35 °C must always be avoided as there is a risk of blocking. The use of duct-fresh (stay-open) inks in pre-printing can result in delaying the varnish to dry, especially on papers with low absorption capacity.

Standard print varnishes are not suitable for finishing food packaging. The fission products necessarily formed as part of the oxidative drying process can affect the smell and taste of the contents which prohibits their use.

Printing auxiliaries

The specified print varnish is ready for printing and can normally be used without the help of additives. However, under exceptional circumstances it may become necessary to adapt the varnish to special printing conditions. The auxiliaries mentioned below are compatible with the highly developed vehicle system:

- for reducing tack with substrates that are susceptible to picking **Ink Oil 10T1405**

Classification

Safety data sheet available on request.