

PROVISIONGARD

Insect blocking package technology

Specifications: ProvisionGard Product Codes:

PGT 23207 (folding cartons) & PGT 24000 (multiwall & corrugate)

MANUFACTURING APPLICATION INSTRUCTIONS

Where to Apply:

Multiwall Bag- one ply will be treated. Please coat either the outside ply or an inner ply for multiwall bag applications.

Corrugate- the outer kraft sheet can be treated prior to corrugating or coated after sheets are formed during the printing process.

Cartons- apply after the printing inks are applied as the final topcoat.

How to Apply:

Flexo/Gravure

Your production team should select an anilox that delivers .5-.7 lbs. per 1000 sq. feet for a water based coating.

The coating is identical to all other water based coatings used for outer ply, i.e. similar viscosities, etc. The coating is ready to use out of the drum. Do not add water. Typically, a 300 line/8-12 cell volume should be close to what is needed to achieve the desired coating weight.

Rod Coating- (Corrugate Applications)

When rod coating is desired; a smooth rod will put you in a range that is optimum for active delivery and effectiveness. If you have blowers on the press, please run them and usually no heat is necessary.

MultiwallBags

If you choose the inner liner approach for Multiwall applications, then pre-coating the kraft paper will be necessary. Run speeds can be as high as 500-900 fpm with 100 % coverage with the dryer blowers on. Heated drying is optional as the coating dries quickly with no blocking on the roll. The paper can then be combined at the tuber, usually at the second liner position with the treated side facing out. The PG treated kraft will glue as normal and uncoated seams are not needed.

If you choose the outer printed ply, then the last station of the printing press should be set up to apply the PG coating over the print. Run it just like you would any other water-base coating that you might use for gloss and COF.

Corrugate

Corrugate applications can be done two ways: one is to pre-coat the kraft paper prior to corrugating, the other is to coat corrugated sheets/ die cut sheets during the typical printing process if your system allows. Face the ProvisionGard printed side to the outside of

the box. It will glue as normal in the box making process. No need to leave glue gaps.

Cartons

The coating is ready to use and can replace a basic carton coat you may be running. It should go directly over the print as a typical carton coat. The gloss will match most current coatings along with COF and rub resistance parameters. It will deliver a 35 to 45 gloss reading. Use the same regular anilox used for standard coatings. Target application is at least .7-1 lb. per 1000 square feet to achieve physical properties.

Drum Setup

Preferably start with a clean pump or pump directly from the drum. Mix the drum before use. After the run is complete, clean up as you would for any other coating. A simple drain/rinse is adequate.

COF

The COF of PGT 23207 will usually match your existing carton coating. Slide angles will range between 18-22 slide angles. The PGT 24000 used for kraft and corrugate will only slightly reduce the COF naturally occurring with these substrates.

Coating Weight / Target Measurements

Specification

- .5 to .7 lbs. per 1000 sq. feet for multiwall bag applications and .7 to 1 lb. per 1000 sq. ft. for folding carton applications
- 1.8 to 2.0 lbs. per 1000 sq. feet is targeted for corrugated applications

Please note there is not a reliable way to measure the coating weight in plant environments. Samples can be taken from the run and sent to ProvisionGard Technology for analysis that will determine if the targeted specification is being achieved.

It is also recommended that samples submitted for active level measurement is obtained when line changes occur such as anilox changes or changing to a different coating line.

Periodic quality checks should be established to monitor application rates over time.

The best way to insure a consistent application is to establish a regular cleaning schedule for the anilox rolls used for application of this coating.