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Manufacturers of Water Based Adhesives Coatings and Polymer Systems

TECHNICAL DATA

PRODUCT CODE : FP 2177
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INTRODUCTION

FP 2177 is a water based dispersion, specifically designed to provide paper and board with a coating that has a very high coefficient of friction (anti-slip).

The main end use being anti slip food tray mats and pallet liners, there are however other applications outside of this, as the coating has a unique 'tactile' feel with good water repellence.

FP 2177 can be applied to substrates by various printing techniques using gravure and anilox rollers.

The porosity and roughness of the substrate will affect the final properties of the coating, therefore it is important to assess the specific application with internal trials.

The optimum dry coating weight for this product will lie between 4gsm for non-porous substrates to 8gsm for highly porous substrates.

The dried coating will deliver a 'static' slip angle of in excess of 45degrees using the inclined plane test method where the bed is stainless steel.

The dried coating will also provide a surface with good level of water repellence and grease resistance.

To activate the anti-slip (grip) component in the formulation it is essential that the drying temperature must be in excess of 100 degrees Celsius.

<u>Infra-red and/or hot air are most effective in delivering the necessary drying schedule needed to achieve the optimum anti-slip properties.</u>

PROPERTIES

Total Solids Content, % 48.0 +/- 1%

рН

7.5 - 8.5

FOOD CONTACT

The dry film components of FP 2177 meet the necessary direct food contact regulations for food packaging.

Further details can be made available on request.

COATING WEIGHT

Coating weights must be carefully controlled on the press.

The coating weight and porosity of the paper will directly influence the anti-slip properties.

A target dry coating weight of between 5gsm for non-porous substrates and 8gsm for highly porous substrates.

STORAGE AND HANDLING

FP 2177 should be stored in sealed containers and kept at temperatures between 5 and 30° C. If the warehouse is cool (i.e. 5-10 deg C) it is advisable to bring the dispersion into the factory to acclimatise the coating to room temperature before use. Do not store containers in direct sunlight.

The dispersion requires gentle stirring for 15 minutes before use to ensure the individual components of the formulation are homogeneous.

In order to prevent the coating sticking to the application rollers the applicator should be kept running during any machine stoppages.

Provided the coating remains wet the machine can be easily cleaned with warm water.

Dry film deposits may require some solvent.

It is highly recommended that coating is pumped through a clean peristaltic pump from the IBC into the press tray.

FP2177 has 6 months storage stability in the wet state.

SAFETY DATA

Appropriate personal protective equipment must be worn when handling FP 2177.

Full details are given in the appropriate Material Safety Data Sheet.