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**Manufacturers of Water Based Adhesives
Coatings and Polymer Systems**

TECHNICAL DATA

PRODUCT CODE : **FP 2200**
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INTRODUCTION

FP 2200 is a soft cold seal designed for a wide range of flexible 'mono' film applications where cold seal release lacquer is used for release in the reel.

This grade of cold seal has been formulated to have excellent adhesion to non- corona treated OPP. Bond strengths on the various grades of flexible films are available on request.

COMMERCIAL BENEFIT

FP2200 has been developed to provide the converter with a cost release benefit. The cold seal has been formulated to provide strong bonds at low coating weights.

Flexible packaging converters have generally worked to a cold seal target coating weight specification of 3.75gsm dry for a new gravure cylinder, having it re-etched when it reaches 3.0gsm. FP2200 cold seal will allow the converter to use a much shallower cylinder adopting a target specification of 3.25gsm dry for a new gravure cylinder, having it re-etched when it reaches 2.5gsm.

This will provide a saving of 0.5 gsm dry coating weight, which directly equates to 13% less cold seal usage.

Therefore, as a guideline if the cold seal is priced at £1.90/kg (2.20 Euros/kg) the commercial benefit to the converter would be £988 (1148 Euros) for every 4 tonnes of cold seal used.

TECHNICAL BENEFIT

1. FP2200 has also been developed to provide a very high level of mechanical stability in the wet state (ie 4000 - 5000 seconds under the klaxon test method – more detail of this test is available on a powerpoint presentation). The benefit of this high level of mechanical stability will provide a more 'user friendly' cold seal for converters, reducing the rate of build-up of dry cold seal behind the doctor blade which results in streaks and scumming on the gravure cylinder.

This benefit becomes very apparent when you are applying cold seal to metallised and clear films.

2. FP2200 has been formulated with a low level of ammonia. This reduces the effects of ammonia when the cold seal is exposed in the application tray.

PROPERTIES

Total Solids Content, %	54.0 – 56.0%
Viscosity (ready for use)	150 - 300 c. poise
pH	10.0 -10.5

COATING WEIGHT

Cold seal coating weights must be carefully controlled on the press, the recommended coating weight for a new cylinder is 3.0 – 3.5 gsm.

When the coating weight falls to 2.5 gsm it is strongly recommended that the cylinder be re-etched to avoid issues with bond strengths on aged reels.

FOOD CONTACT

The dry film components of FP 2200 meet the necessary direct food contact regulations for food packaging.

Further details can be made available on request.

FP 2200 does not contain any traces of acrylamide – a full statement can be provided on request.

STORAGE AND HANDLING

FP 2200 should be stored in sealed containers and kept at temperatures between 5 and 30^oC. If the warehouse is cool (i.e. 5-10 deg C) it is advisable to bring the cold seal into the factory to acclimatise the adhesive to room temperature before use. Do not store containers in direct sunlight.

The cold seal must be gently stirred before use to ensure the individual components of the formulation are homogeneous.

The cold seal must not come into contact with copper or copper alloys.

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

SAFETY DATA

Appropriate personal protective equipment must be worn when handling FP 2200. Full details are given in the appropriate Material Safety Data Sheet.

Cold seal FP2200 has the benefit of a low ammonia level to reduce the exposure effects during conversion.