

UPM Raflatac Technical Information

19.09.2016 ENG 1119

Product	PVC WHITE UD / RP77 / HD 70 WHITE		
Sales Code	BFB/RP77/28		
EAN	6415788091852		
Product use	Highly frangible white labelling material that is specifically designed for security labelling. The film face is extremely brittle and will destroy in small pieces when an attempt to tamper with the label is made.		
Face	PVC WHITE UD		
Product	White, matt PVC film with defined low elongation at break.		
Substance	100	g/m ²	ISO 536
Caliper	50	µm	ISO 534
Tensile strength MD	20	N/mm ²	EN ISO 527
Elongation MD	4	%	EN ISO 527
Printability	Printable by flexo, screen and offset; other methods should be tested. TTR printable. Tests with the specific TTR printer and ribbon combination are recommended. Tests showed good printing results with Armor AXR 7+ and Ricoh B110 C.		
Adhesive	RP77		
Type	Permanent adhesive.		
Composition	Acrylic, water borne.		
Use	General purpose high-tack adhesive for white films in combination with paper liners. This softer adhesive is typically used in the labelling of uneven PE and PP surfaces, providing immediate repositionability and then strong final adhesion in application.		
Tack min	15	N	FTM 9
Service temperature min	-20	°C	
Service temperature max	70	°C	
Limitations	High temperature/humidity during the storage might cause adhesive bleeding from the edges of the rolls. UV resistance of the adhesive is limited. Not recommended for transparent face materials.		
Shelf life	From the date of manufacture 2 years at +20°C and RH 50%. Prolonged storage at higher temperatures and/or humidity levels will shorten the shelf life.		
Backing	HD 70 WHITE		
Product	White transparent glassine backing paper.		
Use	Specially developed for filmic label material giving the best conversion properties. Good with photocells dispensing systems.		
Substance	61	g/m ²	ISO 536
Caliper	54	µm	ISO 534
Tensile strength MD	7.0	kN/m	ISO 1924
Tensile strength CD	2.6	kN/m	ISO 1924
Transparency	51	%	DIN 53147



Performance

Total caliper	125 µm
Service temperature	-20 °C to 70 °C
Shelf life	From the date of manufacture: 1 year at room temperature +20 °C and RH 50% in original packaging and protected from light. Prolonged storage at higher temperatures and/or humidity levels will shorten the shelf life. Remaining film and converted label reels should be stored in plastic bags.

Information

Product information	<p>We have collected some converting and handling tips based upon our experiences, which should help to produce security labels in the most effective way. · Die-cutting tool should be adjusted to the face. It's recommended to send sample material to the die-cutting tool manufacturer for an optimum tool. · Label corners should have a larger radius than normal (minimum 5mm) · The matrix should be wider than the norm used with most other materials · Face and adhesive needs to be properly die-cut, otherwise there will be an additional tension during matrix removal · Matrix removal should take place directly after die-cutting to prevent adhesive "flowing" back · Matrix removal after die cutting using large diameter roller, not a blade (if possible). · Tension of matrix removal needs to be adjusted. Recommended matrix removal angle: 90° · The edge trim should be wider than normal to support the matrix stripping · If possible, try to take the edge trim of the backing and stick it to the matrix to support the matrix stripping · Low temperature makes the film even more brittle. Higher temperature makes the material a little bit more elastic. A little heating of the web could be an option, but needs to be tested. · Remaining film and converted label reels should be stored in plastic bags to avoid plasticizers migrating out of the film, when material is stored for a longer period of time. · Correct machine speed. Rather slower than faster. Experiences show that higher machine speeds are not possible, because the tension at matrix removal becomes too high. Unfortunately machine related settings are difficult to advise as each machine is different. Needs to be tested. In general this product is suitable for manual and automatic dispensing. We recommend to validate the functionality under original conditions. The face destruction when an attempt to remove the label is made, requires a specific adhesion to the substrate. We recommend to consider all parameters, which influence the adhesion, which are substrate, temperature, application pressure, dwelling time.</p>
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Disclaimer The performance of the product should always be tested in the actual application conditions. Our recommendations are based on our most current knowledge and experience. As our products are used in conditions beyond our control, we cannot assume any liability for damage caused through their use. Users of our products are solely responsible that the product is suitable for its intended application, and have determined such at their sole discretion. Users must comply with any applicable legislation and/or testing requirements for the finished article, and are responsible for bringing their products to market.

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