

RA-33W WATER BASED RELEASE AGENT SOLUTION PRELIMINARY DATA

RA-33W is a second generation water based release agent used in a variety of pressure sensitive adhesive tapes including OPP packaging tapes and polyethylene-backed diaper fastening tapes with adhesives based on SIS block copolymers, SBR and natural rubber. The release is also effective in polyester, vinyl and filament tape constructions. Polypropylene and polyethylene films should be free of any lubricants, or other surface-finishing materials, and must be corona treated to 38 dyne/cm, or higher, to obtain effective release.

Coater-ready solutions are easily prepared by mixing **RA-33W** with water (deionized if the local water supply is too hard) to 1-5% total solids, depending on the adhesive, substrate and coating method, which can be Meyer bar #6-12, rotogravure roll #160-250 and stacked smooth rolls. The following is a recommendation for initial laboratory evaluation: Coat the film placed on a glass plate with a 2% T.S. solution of **RA-33W** using a #6 Meyer rod and dry horizontally in air oven at 150°F (70°C) for 10 minutes or until completely dry. This may be followed by a pilot coater trial or production evaluation.

Release properties develop by simply flashing off water in the production oven at 100-250°F (40-120°C), depending on web speed, oven length, dry air temperature, dry air velocity and other configurations. No crosslinking occurs on drying but it is important to achieve complete drying.



Use the highest possible drying temperature to maximize the running speed. The coating is dry when the film is clear and resists moderate finger rub.

TYPICAL PROPERTIES PRELIMINARY TEST DATA			
APPEARANCE	CLEAR TO SLIGHTLY HAZY		
TOTAL SOLIDS	28%		
VISCOSITY	200cps		
рН	8		

UNWIND ADHESION VALUE - g/2"(5cm) UNWIND ADHESIONS (G/5CM) WITH GENERAL PURPOSE OPP PACKAGING TAPE WITH SIS-BASE BLOCK COPOLYMER PSA

		LOW SPEED** (5 CM/ MIN.)	HIGH SPEED*** (91 M/ MIN.)
GREEN (OFF-SLITTER)	EASY	200	100
AGE 150°F (65°C) FOR 72 HR	MODERATE	450	200
AGE 120°F (49°C) AT 90% RH FOR 72HR	MODERATE	350	150
SHELF STORAGE 12 MONTHS	MODERATE	350	150

^{**} INSTRON 3366

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