



RHOPLEX™ R-225 Acrylic Emulsion Polymer Release Coating

Regional Product Availability

- North America

Description

RHOPLEX™ R-225 Acrylic Emulsion Polymer is designed to be used in release coatings for masking tapes. It offers tape manufacturers the application advantages of water-based systems. This polymer is simple to formulate, requires no catalyst, and offers the good initial release and re-adhesion characteristics that are obtained with solvent-based release systems.

RHOPLEX R-225 Acrylic Emulsion Polymer can be coated onto flat or creped saturated backings, offering a good release surface for the natural and synthetic rubber adhesives that are typically used for masking tape applications.

RHOPLEX R-225 Acrylic Emulsion Polymer has been successfully coated onto saturated paper with varying degrees of creping using roll coaters with knife or rod metering devices as well as with air knife coaters. The product may be applied as received or in diluted form.

As is typical with most aqueous emulsion systems, RHOPLEX R-225 Acrylic Emulsion Polymer is subject to foam generation. Free-fall and cascading of the polymer should be minimized. Your Dow Technical Sales Representative can assist you with selection and design of pumps and delivery systems for RHOPLEX R-225 Acrylic Emulsion Polymer.

Typical Physical Properties

(These properties are typical but do not constitute specifications.)

Property	Value
Polymer Type	Acrylic
Appearance	Milky-white
Solids, %	38
pH	9.4
Brookfield LVF Viscosity, cps (#1 spindle, 60 RPM @ 25°C)	< 30
Density, lbs/US gal	8.8
gm/ml	1.06
Tg, °C .	32
Particle Charge	Anionic
Stability: Mechanical	Excellent
Freeze/Thaw Stability	Protect from freezing

Safe Handling Guidelines

This product contains materials which have potential for skin and eye irritation. Therefore, this product must be handled with care and with strict adherence to industrial hygiene practices. Consult the Material Safety Data Sheet before using this product.

Performance Properties of RHOPLEX™ R-225 Acrylic Emulsion Polymer

The following data were obtained using test samples prepared by coating RHOPLEX™ R-225 Acrylic Emulsion Polymer onto 30-lb. crepe stock using a No. 4 wire wound rod. The coated samples were dried 1 minute @ 325°F (163°C) and mounted onto SS plates using double-faced tape. Selected 1-inch (2.54 cm) wide masking tapes were laminated to the coated crepe.

Peel Adhesion of Masking Tape to RHOPLEX R-225 Acrylic Emulsion Polymer (These properties are typical but do not constitute specifications.)

Tape Sample	73°F (23°C) / 50% RH		150°F (66°C) / 80% RH ¹			
	24 Hours		24 Hours		7 Days	
	Release ²	Readhesion ³	Release	Readhesion	Release	Readhesion
A oz/linear in (gm/2.54 cm)	11 (310)	21 (595)	20 (565)	18 (510)	22 (625)	16 (455)
B oz/linear in (gm/2.54 cm)	20 (565)	35 (990)	16 (455)	18 (510)	13 (370)	25 (710)

¹4 hrs. @ 73°F (23°C)/50% RH conditioning prior to testing

²PSTC-4

³PSTC-101

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