

**PRIMAL™ R-253 Emulsion**

Release Coating for Masking Tape

**Regional Product Availability**

- Asia Pacific
- Latin America

**Description**

PRIMAL™ R-253 Emulsion is designed for use as an aqueous release coating, particularly for masking tapes. Coated directly over creped or flat saturated tape stocks or base coated saturated tape stock, PRIMAL R-253 Emulsion offers a release surface for a typical masking tape adhesive. These release properties are retained over extended storage periods as indicated by accelerated high temperature/high humidity aging tests.

**Typical Physical Properties**

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

Property	Value
Polymer Type	Acrylic
Apperance	Milky-white
Solids,%	40±0.5%
PH	8.5-9.5
Brookfield LVF Viscosity, cps (#1 spindle, 60 RPM@25 °C)	<100
Tg, °C	33
Particle Charge	Anionic
Mechanical Stability	Good
Freeze/Thaw Stability	Protect from freezing

**Recommended Operating Conditions**

A coating weight of between 5 and 10 g/m<sup>2</sup> dry of PRIMAL™ R-253 Emulsion is recommended and may be applied by any means capable of metering the desired coat weight onto the flat or creped paper stock. The recommended drying temperature is 150°C to 160°C.

**Safe Handling Information**

PRIMAL™ R-253 Emulsion may present a slight skin and eye irritant on prolonged or repeated contact, and its handling and use require the typical precautions related to these emulsions, such as adequate ventilation when the material is heat cured or dried and good industrial hygiene practice. Consult the Material Safety Data Sheet before using this product.

**Typical  
Performance  
Properties of  
PRIMAL™ R-253  
Emulsion<sup>1</sup>**

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

180° Peel <sup>2</sup>	Release	Re-Adhesion
Unaged- g/25 mm	370	675
Aged 1 day at 65°C/80% RH-g/ 25 mm	290	475
Aged 2 days at 65°C/80% RH-g/ 25 mm	440	565

	Solvent Wet Rub <sup>3</sup>	
	Solvent Mix	Solvent Mix
<b>Solvent Resistance</b>	No. 1 <sup>4</sup>	No. 2 <sup>5</sup>
Dwell time, 60 secs	20	20

Thermoplasticity	Sentinel Heat Seal <sup>6</sup> 60 psi, 1 second, face/face			
Temperature	79°C	90°C	121°C	149°C
Rating	1	1	1+	2+

<sup>1</sup> PRIMAL™ R-253 Emulsion Coat weight of 9.8 g/m<sup>2</sup> on flat base stock

<sup>2</sup> 180° Peel measured at 200 mm/min machine speed

<sup>3</sup> Number of circular finger strokes required to disrupt coated surface

<sup>4</sup> Xylol/butanol (90/10)

<sup>5</sup> Butyl acetate/toluene/pentanol/butanol (40/25/10/25)

<sup>6</sup> Heat Seal Rating:

- 0 no seal
- 1 very slight seal
- 2 slight seal
- 3 moderate seal ¼ fibre pull

**Food Legislation**

**FDA Compliance**

**PRIMAL™ R-253 Emulsion**

FDA Regulation	Complies	Limitations	Opinion Date
21CFR175.105 (Adhesives)	Yes		1-9-2012

Regulations may vary by city, state, country, or geographic region. Please contact the Dow Customer Service Group in your region for any additional, relevant regulatory information.

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