

RHOPLEX™ R-253 Emulsion

Release Coating for Masking Tape

Regional Product Availability North America

Description

RHOPLEX™ 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, RHOPLEX 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

Typical
Performance
Properties of
RHOPLEX™ R-253
Emulsion¹

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

180° Peel ²	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 ³		
	Solvent Mix	Solvent Mix	
Solvent Resistance	No. 1 ⁴	No. 2 ⁵	
Dwell time, 60 secs	20	20	

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

¹ RHOPLEX™ R-253 Emulsion coat weight of 9.8 g/m² on flat base stock

- 0 no seal
- 1 very slight seal
- 2 slight seal
- 3 moderate seal \4 fibre pull

Food Legislation

FDA Compliance

RHOPLEX™ R-253 Emulsion

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

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.

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

³ Number of circular finger strokes required to disrupt coated surface

⁴ Xylol/butanol (90/10)

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

⁶ Heat Seal Rating:

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