

Vinyl Acrylic Latex for Architectural Coatings

Product Description

ENCOR[®] 317 vinyl acrylic latex is designed for interior architectural coatings where improved tint strength and meeting Master Painters Institute[®] (MPI[®]) standards are of primary importance. ENCOR[®] 317 vinyl acrylic can be used effectively in interior coatings across the PVC range from flat to semi-gloss finishes. It provides excellent film properties such as touch-up, burnish and scrub resistance. ENCOR[®] 317 vinyl acrylic is EnVia[®] Certified¹ and provides formulators the ability to meet regulatory requirements.

Polymer Design

- Vinyl Acrylic

Performance Benefits

- Ability to meet MPI[®] specifications (based on internal studies and testing)
- Improved tint strength performance
- Flat to semi-gloss formulation capability
- Excellent touch up properties and burnish resistance

Typical Polymer Properties²

| | |
|--|----------|
| Total Solids, % by weight | 55 |
| Viscosity, Brookfield, cPs, #2 LVT @ 30 rpm, 25°C | <800 cPs |
| pH Value | 4.5 |
| Minimum Film-Forming Temperature (MFFT), °C | 10 |
| Glass Transition Temperature (T _g), midpoint, °C | 16 |
| Density, pounds per gallon | 8.9 |

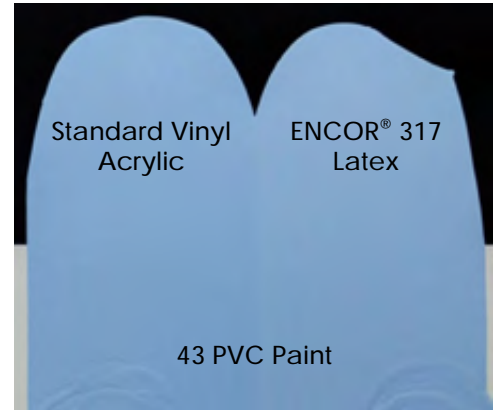
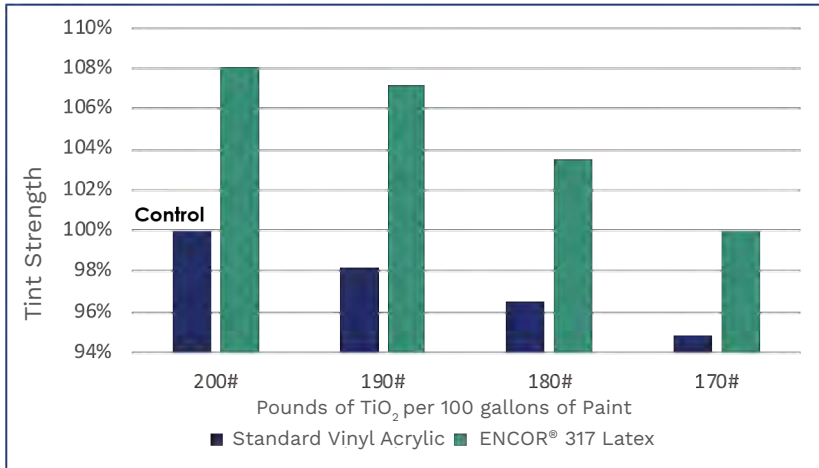
¹ These products meet the standards of Coating Resins – Arkema's EnVia[®] program. These products are designed to assist formulators in meeting their sustainability and regulatory goals in their finished products.

² Typical values not to be construed as sales specifications.

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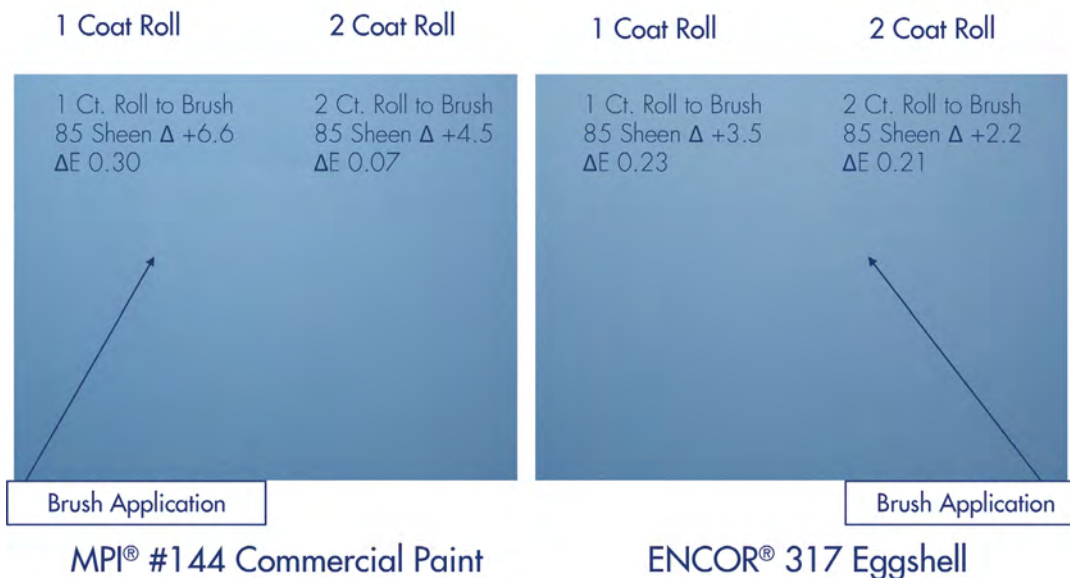
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ENCOR® 317 Latex has been Designed to Yield Improved TiO₂ Efficiency over Standard Vinyl Acrylic



By conversion from standard vinyl acrylic to ENCOR® 317 Latex, there can be additional cost savings through reduced TiO₂ usage.

ENCOR® 317 Latex Shows Excellent Touch Up Properties in an Eggshell Formulation



Primed with vinyl acrylic based primer.

Since touch up is one of the more critical performance parameters for contractor application, ENCOR® 317 Latex was developed to ensure that touch up was maintained.

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ENCOR® 317 Vinyl Acrylic Latex Delivers MPI® Performance Across Sheens

MPI® specifications for interior wall paints are divided into gloss level, signifying sheen.

| Description | Gloss Specs | Performance Level | MPI® Spec | ENCOR® 317 Latex | Competitive Resin |
|------------------------|--------------------------------|-------------------|-----------|------------------|-------------------|
| Interior Gloss Level 1 | 60° ≤ 5 85° ≤ 10 | Standard | MPI® 53 | ✓ | ✓ |
| | | Institutional | MPI® 143 | ✓ | ✗ |
| | | High Performance | MPI® 142 | ✓ | ✗ |
| Interior Gloss Level 2 | 60° ≤ 10 10 ≤ 85° ≤ 35 | Standard | MPI® 44 | ✓ | ✓ |
| | | Institutional | MPI® 144 | ✓ | ✗ |
| | | High Performance | MPI® 138 | ✓ | ✗ |
| Interior Gloss Level 3 | 10 ≤ 60° ≤ 25 10 ≤ 85° ≤ 35 | Standard | MPI® 52 | ✓ | ✓ |
| | | Institutional | MPI® 145 | ✓ | ✗ |
| | | High Performance | MPI® 139 | ✓ | ✗ |

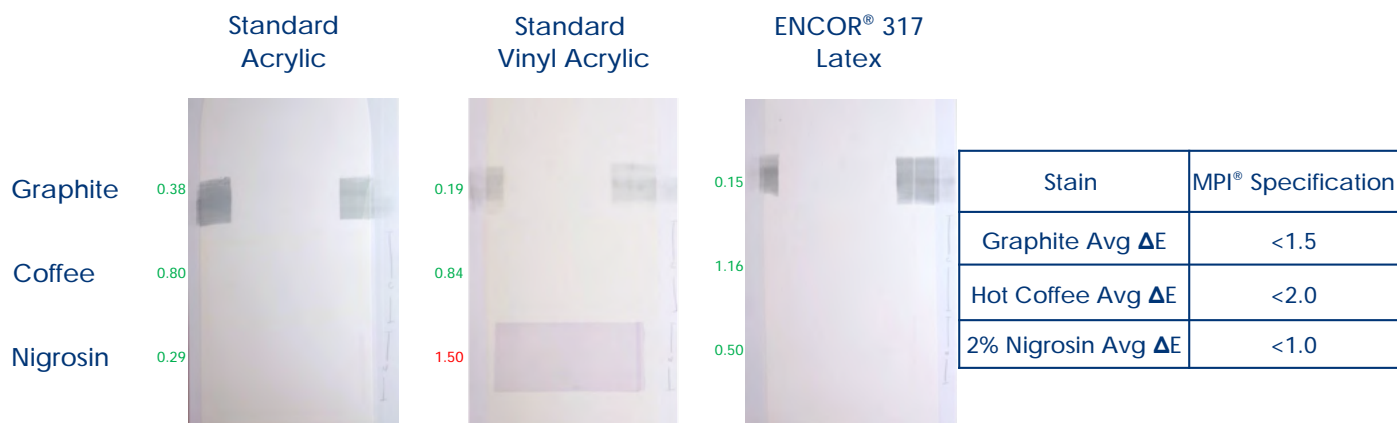
✓ = pass

✗ = fail

(based on internal studies and testing)

Standard vinyl acrylic binders struggle to meet the challenging MPI specifications when used as the sole binder. ENCOR® 317 Latex allows great cross-sheen performance without modification.

As the Sole Binder, ENCOR® 317 Latex Delivers Cleansability Specifications, Especially the Difficult Nigrosin Test



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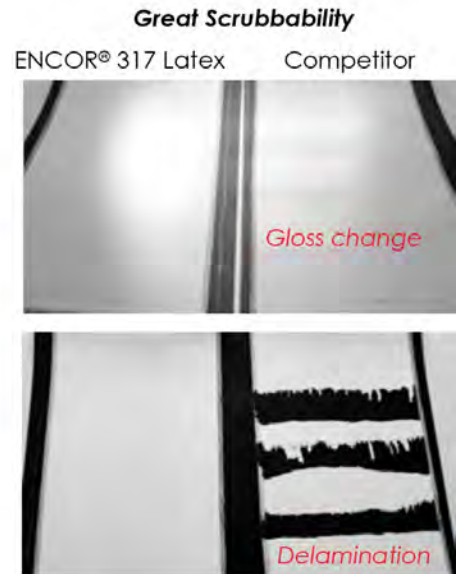
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ENCOR® 317 Latex Passes High Performance and Institutional Specifications

MPI® Performance Standards for Interior Latex Paints

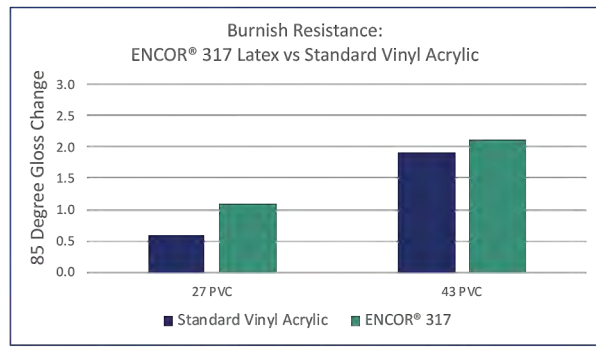
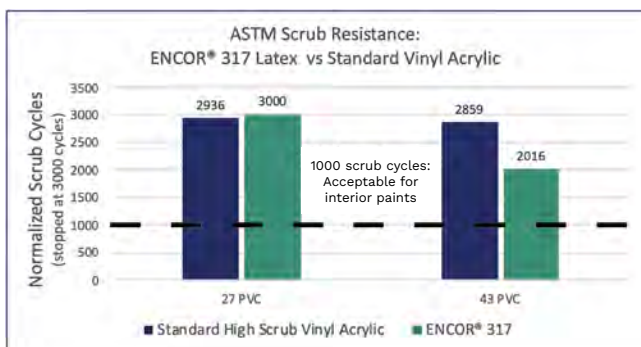
- Gloss/Sheen
- Hiding
- Reflectance
- Alkali resistance
- Scrubbability
- Burnish Resistance
- Flexibility
- Cleansability

(based on internal studies and testing)



By passing a number of rigorous tests, meeting MPI® specifications signifies excellent overall performance.

ENCOR® 317 Latex Demonstrates Good Cross-sheen ASTM Scrub Resistance and Excellent Burnish Resistance

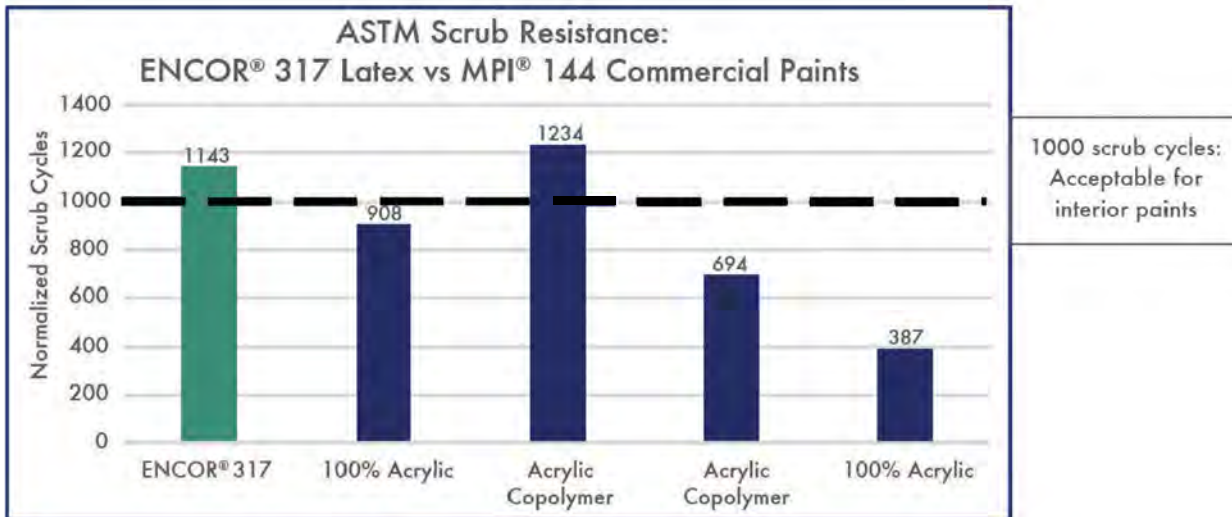


Test Method: 7 mil drawdown/7 day ambient dry
Cheesecloth with 450g weight for 50 cycles

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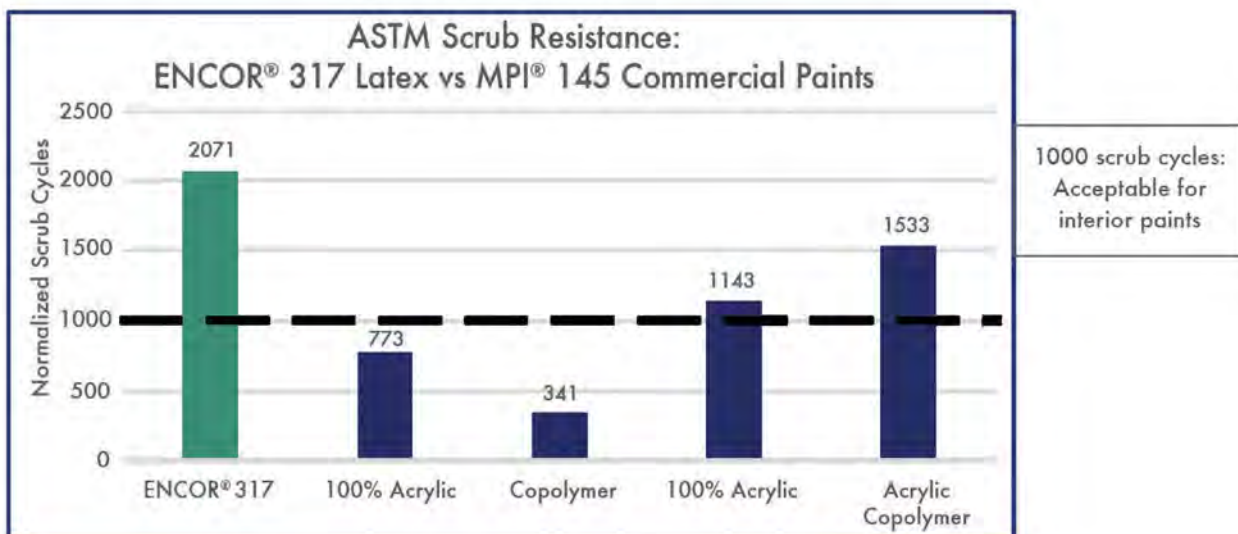
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In MPI[®] 144 Formulation, ENCOR[®] 317 Latex Meets or Exceeds Scrub Resistance Against Commercial MPI[®] 144 Paints



(based on internal studies and testing)

In MPI[®] 145 Formulation, ENCOR[®] 317 Latex Exceeds Scrub Resistance Against Commercial MPI[®] 145 Paints



(based on internal studies and testing)

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Product Safety

Before handling the materials listed in this bulletin, read and understand the product SDS (Safety Data Sheet) for additional information on personal protective equipment and for safety, health and environmental information. For environmental, safety and toxicological information, contact our Customer Service Department at 1-866-837-5532 to find an SDS, or visit our web site: www.coatingresins.arkema.com

No chemical should be used as or in a food, drug, medical device, or cosmetic, or in a product or process in which it may contact a food, drug, medical device, or cosmetic until the user has determined the suitability and legality of the use. Since government regulations and use conditions are subject to change, it is the user's responsibility to determine that this information is appropriate and suitable under current, applicable laws and regulations.

Coating Resins – Arkema requests that the customer read, understand, and comply with the information contained in this publication and the current SDS(s). The customer should furnish the information in this publication to its employees, contractors, and customers, or any other users of the product(s), and request that they do the same.

Storage and Handling

Follow procedures typically recommended for polymer dispersions. Use corrosion-resistant storage tanks and piping. Air-operated diaphragm pumps are preferred. Avoid temperature extremes. Do not freeze; store between 1-30°C.

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It is the sole responsibility of the manufacturer of the medical device to determine the suitability (including biocompatibility) of all raw materials, products and components, including any medical grade Arkema products, in order to ensure that the final end-use product is safe for its end use; performs or functions as intended; and complies with all applicable legal and regulatory requirements (FDA or other national drug agencies). It is the sole responsibility of the manufacturer of the medical device to conduct all necessary tests and inspections and to evaluate the medical device under actual end-use requirements and to adequately advise and warn purchasers, users, and/or learned intermediaries (such as physicians) of pertinent risks and fulfill any postmarket surveillance obligations. Any decision regarding the appropriateness of a particular Arkema material in a particular medical device should be based on the judgment of the manufacturer, seller, the competent authority, and the treating physician.

Coating Resins

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