

ENCOR® FLEX 192

MODIFIED ACRYLIC LATEX FOR GENERAL PURPOSE
ELASTOMERIC COATINGS AND SPECIALTY ROOF COATINGS



Product Description

ENCOR® Flex 192 is a high solids, ambient-crosslinking, modified acrylic latex designated for use in elastomeric roof and wall coatings. General purpose elastomeric coatings based on ENCOR® Flex 192 latex exhibit excellent dirt up resistance. This latex can also be formulated into self-priming elastomeric coatings for use in restoration of aged TPO roof membranes without the need for solvent-based primers.

Properly formulated ENCOR® Flex 192 also meets the requirements of ASTM D-6083 ("Standard Specification for Liquid Applied Acrylic Coating used in Roofing") and the "Cool Roof Rating Council's (CRRC)" product rating program for reflectance and emittance at VOC levels less than 50 grams per liter.

Polymer Design

- Modified Acrylic Latex
- High solids for greater formulating latitude
- Low VOC Capable (<50 g/L)

Performance Benefits

- Excellent adhesion to all membrane types, including aged TPO
- Suitable for self-priming elastomeric coatings thereby eliminating the need for solvent-based primer resulting in reduced overall system VOC and cost
- Ambient crosslinking functionality for increased toughness and superior dirt pick-up resistance
- Outstanding elastomeric properties (elongation, tensile, tear)
- Meets ASTM D-6083 performance standards for elastomeric coatings

Typical Properties¹

Total Solids, % by weight	60
Latex Weight per Gallon, lb	8.7
pH Value	8
Particle Size, μm	0.35
Viscosity, Brookfield, cP	500
Glass Transition Temp. (Tg), midpoint °C	-21

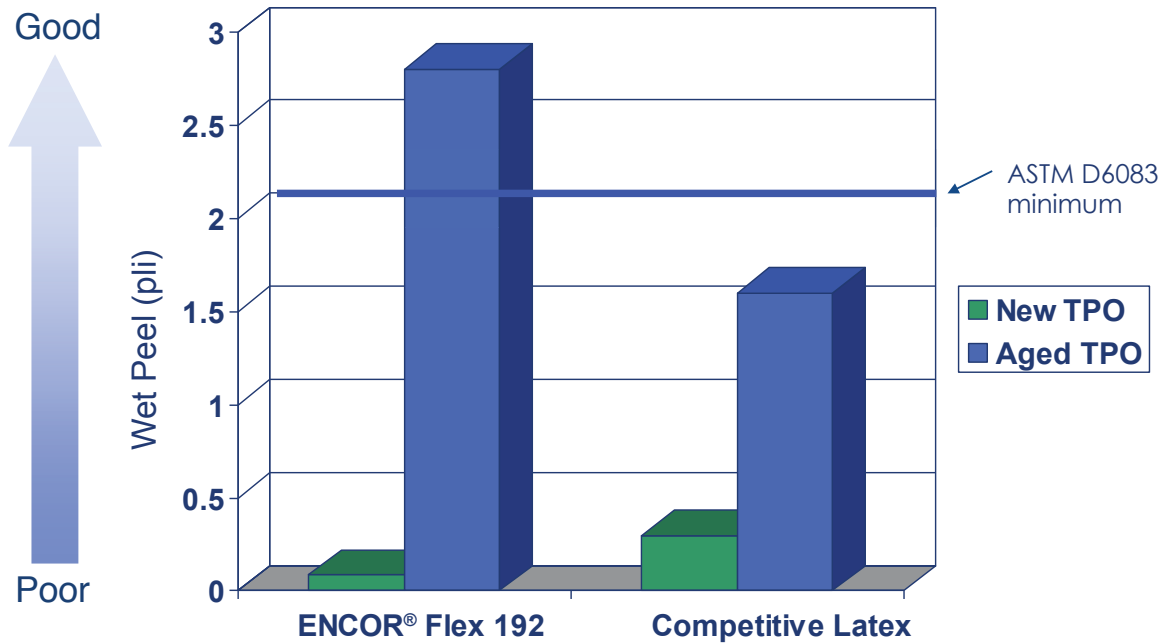
¹Typical values not to be construed as sales specifications.



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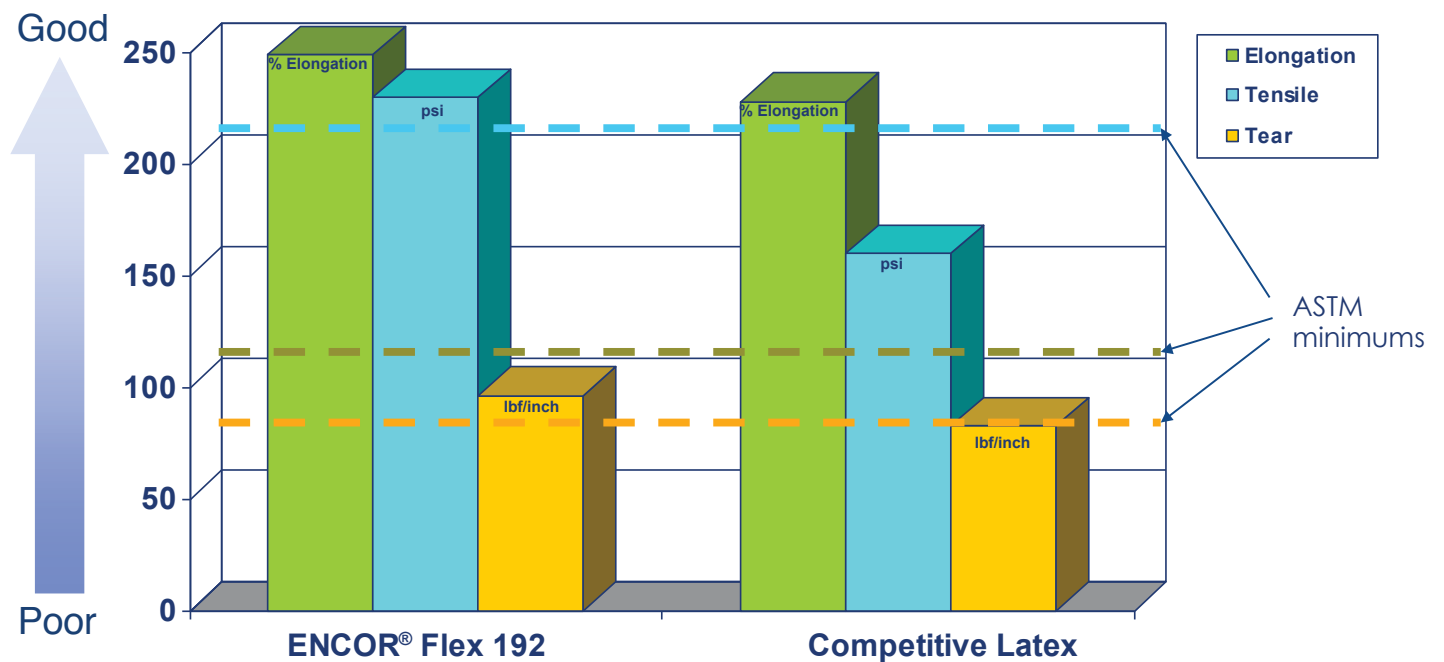
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Adhesion Performance



Passes ASTM D6083 wet peel adhesion requirement, even over difficult to adhere to membranes such as aged TPO, without requiring a solvent-based primer.

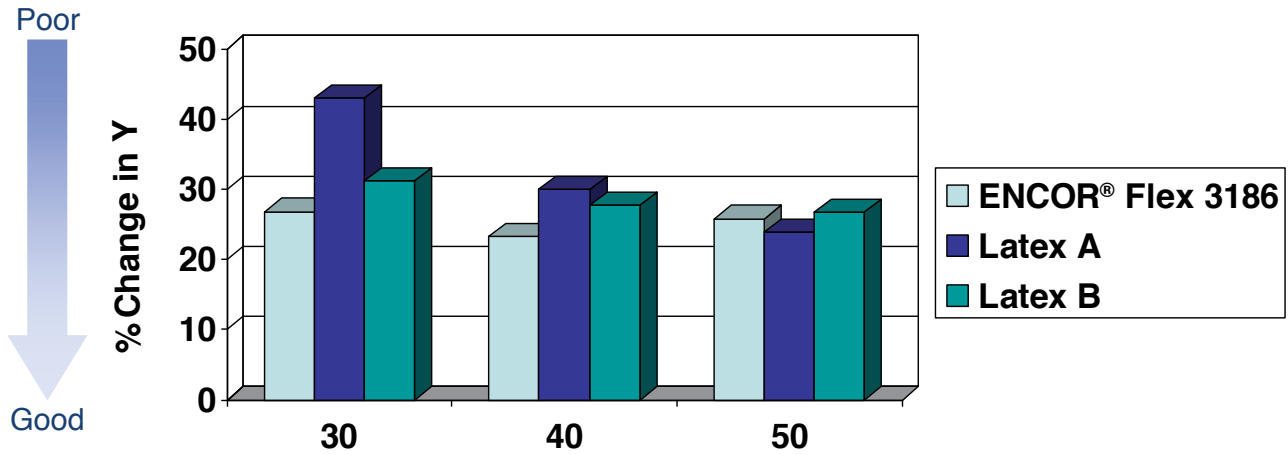
Elastomeric Properties



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Accelerated Dirt Pick-Up Resistance *



* Coatings tested after 100 hours QUV

Dirt added as a slurry and allowed to dry overnight.

Exterior Durability

Sprayed Polyurethane Foam Substrate.



Thermoplastic Polyolefin Substrate.



The superior dirt pick up resistance of ENCOR® Flex 192 is highlighted in sections C and E after 3 years exposure in Cary, NC.

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Starting Point Formulation

ENCOR® Flex 192 Formulation

Ingredients		Lbs	Gallons
<i>Grind</i>			
Water		134.4	16.13
Propylene Glycol	Solvent	10.0	1.16
Ecodis™ P 30	Dispersant	4.3	.43
Natrosol™ 250 MBR	HEC Thickener	1.5	.15
Ammonium Hydroxide (28%)	Base	1.5	.2
FoamStar® A10	Defoamer	2.0	.27
Ti-Pure® R-960	TiO ₂	75.0	2.25
Omyacarb® 10	CaCO ₂	380.0	16.84
Acticide® BW20	Preservative	2.0	.21
Mildewcide	Biocide	15.0	1.45
		625.7	39.09
<i>Letdown</i>			
ENCOR® Flex 192	Binder - Latex	490.1	56.07
FoamStar™ A10	Defoamer	2.0	.21
Texanol® NXZ	Solvent	6.0	.76
Ammonium Hydroxide, 28%	Base	1.5	.2
Water		36	4.36
Natrosol® 250 MBR	HEC Thickener	2.5	.25
Totals		1163.8	100.00

Paint Properties:

Weight Solids, %	65.5
Volume Solids, %	50.1
PVC, %	38.2
VOC, lb/gal	0.31
VOC, g/L	36.9
Density, lb/gal	11.70
Total Pigment, %	38.96
Non-volatile Binder, %	25.18
Coalescent Level, %	2.04
Dispersant Level, %	0.38

Formulating Guidelines

- Avoid associative thickeners due to water sensitivity
- Extenders should be limited to low oil absorption and particle sizes above 10µm
- Zinc oxide should be avoided due to interference with bonding chemistry when used on TPO
- Keep pigment volume concentration less than 45%; higher PVCs can lower adhesion results
- Apply to properly cleaned TPO membranes with at least two years of UV exposure and without excessive deterioration or scrim exposed
- Field testing is recommended to assure adhesion

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Natrosol™ is a trademark of Ashland Global Holdings Inc.

FoamStar® is a registered trademark of the BASF Group

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Omyacarb® is a registered trademark of Omya AG

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Texanol® is a registered trademark of Eastman Chemical Company

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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 a SDS, or visit our web site: www.arkemacoatingresins.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.

Arkema Coating Resins 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.

Packaged material should be stored indoors in the original unopened and undamaged container, in a dry place. Exposure to direct sunlight should be avoided.

Avoid extreme temperatures. Do not freeze; store between 40-90°F (4-32°C).

For more details, refer to "*Storage and Handling of Arkema Coating Resins Products – A Basic Guide*".



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