



## Polymers for fluid-applied air barrier coatings

The air barrier is an integral component of an effective building envelope, allowing architects and builders to meet energy efficiency goals and building codes requirements. With the continual shift to more stringent building codes, architects and contractors alike are looking for resilient air barrier solutions to help achieve their new building designs.

In a recent survey of installers and general contractors, 62% of applicators use fluid-applied air barrier coatings.\*

BASF's diverse range of dispersion and formulation additive chemistries for air barrier coatings offer great flexibility to the formulator when choosing the right combination of ingredients to achieve the high quality and performance they depend on.

\*2019 independent BASF market research

### Features

- Broad range of dispersion polymers and additives for both permeable and impermeable air barrier coating formulations
- Excellent low-temperature flexibility performance of formulated air barrier coatings
- Low water absorption rates
- Superior tensile and elongation properties
- Sustainable water-based, low VOC chemistry
- Non-APEO and non-ammonia containing

# Polymers for fluid-applied air barrier coatings

BASF's portfolio of acrylic and styrene butadiene polymers offers excellent strength, flexibility and versatility for air barrier coatings, boasting low water absorption rates in both highly vapor permeable and vapor impermeable formulations. BASF's chemistry enables building envelope manufacturers to produce advanced products with optimal quality and performance. These raw materials are the building blocks to developing high performance air barrier coatings that span the spectrum of permeability and performance.

	Chemistry	Latex Properties				Formulated Coating				ASTM E96A/B (perms)	Key features of formulated coating	
		pH	Solids content (%)	Tg, °C	Water uptake (%)*	Air barrier	Vapor barrier	Air / vapor barrier	Water resistive barrier			
Vapor permeable	ACRONAL® 4511	Acrylic	7.3	60	-29	11.0	✓				✓	<ul style="list-style-type: none"> <li>• High water vapor permeability</li> <li>• High flexibility</li> <li>• Non-APEO, non-ammonia</li> </ul>
	ACRONAL V 278	Acrylic	4.5	65	-34	13.0	✓				✓	<ul style="list-style-type: none"> <li>• High water vapor permeability</li> <li>• High flexibility</li> <li>• pH self-thickening</li> <li>• EPS adhesive properties</li> <li>• Non-APEO, non-Ammonia</li> </ul>
Vapor impermeable	STYROFAN® NX 1492	SBR	8.5	50	-8	2.5	✓	✓	✓			<ul style="list-style-type: none"> <li>• Very-low water vapor permeability</li> <li>• Flexible coating</li> <li>• Non-APEO</li> </ul>
	BUTOFAN® NS 222	SBR	8.8	51	-26	1.5	✓	✓	✓			<ul style="list-style-type: none"> <li>• Very-low water vapor permeability</li> <li>• High flexibility</li> <li>• Non-APEO</li> </ul>

## Vapor permeable products

### ACRONAL 4511

Recommended for permeable, flexible air barrier coating formulations. High moisture vapor permeability yet low water absorption. Low surface tack, good dirt pick-up resistance and low temperature flexibility. Non-APEO and non-ammonia.

### ACRONAL V 278

Recommended for permeable elastomeric air barrier coating formulations. High moisture vapor permeability yet low water absorption. Features pH self-thickening properties and good adhesion onto EPS. Non-APEO and non-ammonia.

## Vapor impermeable products

### STYROFAN NX 1492

Recommended for vapor impermeable air barrier coating formulations. Provides excellent water resistance, very low water vapor permeability and good filler compatibility. Non-APEO.

### BUTOFAN NS 222

Recommended for vapor impermeable flexible air barrier coating formulations. Provides excellent water resistance, very low water vapor permeability, and high flexibility. Non-APEO.

## Contacts

Contact us to learn more about our polymers and additives for air barrier coatings.

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