

PRODUCT DATA

# **RADIANCE**<sup>™</sup> e-0.25 Attic Barrier

Low-e attic barrier for the underside of roof decks

# **Description**

Radiance™ e-0.25 Attic Barrier is formulated to be sprayed on the underside of the roof deck. When applied it creates an effective radiant barrier that will stop up to 79% of the potential radiant energy transfer into the attic.

The physics behind Radiance™ e-0.25 Attic Barrier is similiar to low-e glass windows, which reduce the absorption of heat into a building in the summer. The "e" refers to emissivity, which is the ability of a surface to emit or absorb radiant energy. The lower the "e" value, the more efficient it is in managing energy and the greater the energy savings for the dwelling.

# Yield

 $325 - 425 \text{ ft}^2/\text{gallon } (8 - 10.5 \text{ m}^2/\text{L})$ 

## **Packaging**

Kit contains 4.1 gallons (15.5 L) Part A: 5 gallon plastic pail (3.6 gallons [13.6 L] of material) Part B: 2 half-gallon metal cans (5.3 lbs [2.4 kg] of material)

# Color

Part A: Milky white

Part B: Silver

When the two parts are mixed, the resulting color is metallic silver

Features		Benefits	
•	Low emissivity with 0.21 "e" value	Reduces cooling costs in summer	
•	Reflects up to 79% of radiant energy	Increases interior comfort level	
•	100% seamless coverage of attic space	More cost efficient than alternative attic systems	
•	Does not alter electromagnetic fields	Will not disrupt attic-mounted antennae or cell phone reception	
•	Breathable	Will not increase attic moisture	
•	One coat coverage on bare wood and primed metal	Fast application	
•	Application by spray, roller and brush	Easy to apply	

# **Shelf Life**

Parts A and B: 12 months when properly stored

# **Storage**

Parts A and B: Store in original containers in a clean, dry area between 40 and 90° F (4 and 32° C). Keep away from direct sunlight. Keep from freezing.

# Where to Use

APPLICATION

- · Bottom side of roof decking
- · Primed or coated metal roofing

# LOCATION

Interior only

#### SUBSTRATE

- OSB
- Plywood
- Chip board
- Wood
- Metal
- Concrete
- Masonry

# **How to Apply**

WOOD SURFACES

1. Apply to a clean, dust-free, dry surface. No need to prime.

METAL SURFACES

- 1. Remove all surface contaminants by washing with an appropriate cleaner.
- 2. Rust and mill scale must be removed using sandpaper, steel wool or other abrading methods.
- 3. Bare metal surfaces must be primed with the appropriate primer. It is usually recommended to prime the same day it is cleaned.



## **Technical Data**

# Composition

Radiance<sup>™</sup> e-0.25 Attic Barrier contains water, acrylic copolymer emulsion and other proprietary ingredients.

# **Compliances**

ASTM C 1321-98

## **Test Data**

PROPERTY	RESULTS	TEST METHODS
"e" value (emissivity)	0.21	ASTM C 1371
Vapor transmission, perms	20	ASTM E 96
Weight per gallon, lbs	8.77	ASTM D 1475
Solid content, %		
By weight	16.4	ASTM D 5201
By volume	12.0	ASTM D 5201
Viscosity, KU	55	ASTM D 562
Flash point, ° F (° C)	150 (65.6)	ASTM D 3278
VOC Content, g/L (lbs/gal)	391 (3.27)	ASTM D 3960

Test results are typical values obtained under laboratory conditions. Reasonable variations can be expected.

## Yield

RATE, FT²/GAL (M²/L)	WET FILM, MILS (MICRONS)	DRY FILM, MILS (MICRONS)
325 – 425 (8 – 10.5)	4 (102)	0.5 (13)

# MASONRY AND CONCRETE

- 1. Apply to clean, dust-free, dry surface. No need to prime.
- 2. Remove all surface contaminants with an appropriate cleaner.

# Mixing

- Remove lid from Part B and use a spatula to put entire contents into the 5 gallon pail containing Part A.
- 2. Mix thoroughly for 3 minutes with a squirrel cage type mixer before use. *Make certain to only mix as much material as can be applied in one day.*

#### **Application**

1. Radiance™ e-0.25 Attic Barrier may be applied by brush, roller and sprayer. The preferred method is spraying.

AIRLESS SPRAYER

Recommended pressure is 2,000 psi using tip size 0.019 to 0.021" (0.48 to 0.53 mm). For best results use a spray pump size 3/4 GPM or greater.

ROLLER

Use a 3/8" (9.5 mm) synthetic-nap roller cover.

#### RRIIS

Use a nylon/polyester device.

NOTE: Because of its use as an attic barrier, with roofing nails penetrating the surface, brushing or rolling may be difficult application methods.

# **Drying Time**

Dries to the touch in 2-4 hours at 77° F (25° C) and 50% relative humidity.

#### Clean Ur

Use warm, soapy water. Follow sprayer manufacturer recommendations when cleaning equipment.

# **For Best Performance**

- Must be applied by a professional applicator.
- Do not topcoat; must remain in contact with air.
- Do not thin.
- Do not tint.
- Radiance<sup>™</sup> e-0.25 Attic Barrier is not designed to withstand any handling.
- To maximize the effectiveness of Radiance™
  e-0.25 Attic Barrier, a minimum of 1"(25.4 mm)
  of airspace is required between the Radiance™
  e-0.25 Attic Barrier and the next substrate.

- Use with proper ventilation.
- Ensure appropriate personal protective equipment is used so that the product does not come into contact with skin, eyes or clothing. Use impervious gloves, eye protection, and if the TLV is exceeded or if used in a poorly ventilated area, use NIOSH/MSHA approved respiratory protection in accordance with local, state and Federal regulations. Review Material Safety Data Sheet for further information.
- Do not expose to open flame.
- Make certain the most current versions of product data sheet and MSDS are being used; call Customer Service (1-800-433-2517) to verify the most current versions.
- Proper application is the responsibility of the user. Field visits by BASF personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

# **Health and Safety**

RADIANCE™ e-0.25 ATTIC BARRIER PART A

#### Warning

Radiance™ e-0.25 Attic Barrier Part A contains no hazardous ingredients in reportable concentrations as defined by 29 CFR.1910.1200 and WHMIS.

#### Risks

May cause skin, eye or respiratory irritation. Ingestion may cause irritation.

#### **Precautions**

Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Keep container closed when not in use. DO NOT take internally. Use only with adequate ventilation. Use impervious gloves, eye protection and if the TLV is exceeded or used in a poorly ventilated area, use NIOSH/MSHA approved respiratory protection in accordance with applicable Federal, state and local regulations.

#### First Aid

In case of eye contact, flush thoroughly with water for at least 15 minutes. In case of skin contact, wash affected areas with soap and water. If irritation persists, SEEK MEDICAL ATTENTION. Remove and wash contaminated clothing. If inhalation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs, or if swallowed, SEEK IMMEDIATE MEDICAL ATTENTION. Refer to Material Safety Data Sheet (MSDS) for

# further information. **Proposition 65**

This product contains materials listed by the State of California as known to cause cancer, birth defects or other reproductive harm.

#### **VOC Content**

391 g/L or 3.27 lbs/gal, less water and exempt solvents when all components are mixed and product is applied per manufacturer's instructions.

RADIANCE™ e-0.25 ATTIC BARRIER PART B

#### Warning

Radiance™ e-0.25 Attic Barrier Part B contains aluminum powder, diacetone alcohol and stearic acid.

# Risks

Combustible liquid and vapor. May cause skin, eye and respiratory irritation. Ingestion may cause irritation. Reports associate repeated or prolonged occupational overexposure to solvents with permanent brain, nervous system, liver and kidney damage. INTENTIONAL MISUSE BY DELIBERATELY INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

# **Precautions**

KEEP AWAY FROM HEAT, FLAME AND SOURCES OF IGNITION. Vapors are heavier than air. Keep container closed. Use only with adequate ventilation. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Avoid breathing vapors. DO NOT take internally. Use impervious gloves, eye protection and if the TLV is exceeded or used in a poorly ventilated area, use NIOSH/MSHA approved respiratory protection in accordance with applicable Federal, state and local regulations.

# **First Aid**

In case of eye contact, flush thoroughly with water for at least 15 minutes. SEEK IMMEDIATE MEDICAL ATTENTION. In case of skin contact, wash affected areas with soap and water. If irritation persists, SEEK MEDICAL ATTENTION. Remove and wash contaminated clothing. If inhalation causes physical discomfort, remove to fresh air. If discomfort persists, or any breathing difficulty occurs or if swallowed, SEEK IMMEDIATE MEDICAL ATTENTION.

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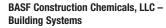
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# **VOC Content**

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For medical emergencies only, call ChemTrec (1-800-424-9300).



889 Valley Park Drive Shakopee, MN, 55379

www.BuildingSystems.BASF.com

**Customer Service** 800-433-9517 **Technical Service** 800-243-6739



LIMITED WARRANTY NOTICE. Every reasonable effort is made to apply BASF exacting standards both in the manufacture of our products and in the information which we issue concerning these products and their use. We warrant our products to be of good quality and will replace or, at our election, refund the purchase price of any products proved defective. Satisfactory results depend not only upon quality products, but also upon many factors beyond our control. Therefore, except for such replacement or refund, BASF MAKES NO WARRANTY OR GUARANTEE, EVENOS OR IMPLED, NOULDING WARRANTES OF FITNESS FOR A PARTICULAR PURPOSE OR MEDICANTAGE. THE CONTROL OF THE PROPERTY OF A PARTICULAR PURPOSE OR MEDICANTAGE. THE PROPERTY OF A PARTICULAR PURPOSE OR MEDICANTAGE. THE PROPERTY OF THE PROPE

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