



GREENSEAL™ 173

TECHNICAL DATA SHEET

DESCRIPTION:

GreenSeal 173 is a fast set, closed cell, water-blown spray polyurethane foam (SPF) insulation system. Designed for use in; residential and commercial structures, exterior foundation or perimeter insulation, below grade applications, exterior tank/ pipe insulation, etc. It exhibits superior thermal insulation, air-barrier and sound attenuation properties compared to conventional insulation materials. Once fully cured GS-173 remains rigid, maintaining significant structural strength and thermal insulation properties in adverse conditions across a wide variety of applications.

Physical Property	Test	Result
Core Density (nominal)	ASTM D-1622	1.7 lb/ft ³
R-Value	ASTM C-518	5.2 @ 1"
Tensile Strength (psi)	ASTM D-1623	45
Compressive Strength	ASTM D-1621	15-20
Water Vapor Permeability (perm)@ 5.5"	ASTM E-96	3.1
Air Leakage (L/s/m ² @75Pa @ 1")	ASTM E-283	0.003
Dimensional Stability (%)	ASTM D-2126	<1 Δ
Fire Rating	E-84	Class 1
Flame Spread Index	E-84	≤ 25
Smoke Development	E-84	≤ 450
Closed Cell Content (%)	ASTM D-2856	50-60
Viscosity (cps) B Component	ASTM D-2196	600-900
A Component		200-250

Typical Uses

- Insulation Foam for; walls, ceilings, rooflines and crawlspaces.
- Residential, Commercial, Industrial.

Features and Benefits

- Made with renewable resources.
- Meets Class 1 fire rating.
- Low Odor during application. Produces no toxic vapors after installation.
- Water-blown, non-ozone depleting substances; VOCs, HFCs and is PBDE-free.
- Monolithic Seal minimizes thermal conductivity and uncontrolled air movement.
- Reduces Energy consumption.
- Easier drum handling than gas blown systems in warm conditions.

Process Guidelines

- *Condition material to 75°-85° F prior to application. Material that is cold or too hot may result in off ratio mixing.
- Equipment Temperatures for hose and preheaters set; 125°-135° F.
- Equipment Pressure; 900-1400 psi.
- Substrate; 32° – 120° F
- Ambient; 40° - 115° F
- Substrate Moisture; < 15%
- Cream Time @ 77°F; 2-4 seconds
- Rise Time @ 77°F; 10-12 seconds

PREPARATION: GreenSeal 173 resin (B) requires mixing 30 minutes prior to application, using an electric or pneumatic drum mixer in the center bung of the drum. Ensure the mixer is securely attached. Folding blade arrangement ; 6" blade top, 6" blade middle, 8" blade bottom is recommended. Continually mix B-side (resin) while applying material.

APPLICATION INSTRUCTIONS: GreenSeal 173 is installed by independent SPF contractors. It is recommended that building owners verify that the SPF insulation contractor maintains proper credentials, insurance, and licenses and is properly trained to safely install SPF insulation products.

GreenSeal 173 demonstrates excellent adhesion to various substrates when installed according to manufacturer specifications. Allow a minimum of 2 hours for full off-gas and cure before application of a primer, topcoat, or intumescent paint. For best results apply primer, topcoat, or intumescent coating within 72 hours of installation of foam. GreenSeal 163 should be installed in 1-2 inch uniform passes with a maximum thickness of 2 inches per pass and a minimum of 30 minutes between passes. IT IS THE APPLICATOR'S RESPONSIBILITY TO TEST LIFT THICKNESS FOR A PARTICULAR APPLICATION PRIOR TO COMMENCING INSTALLATION TO ENSURE THAT THE PRODUCT CAN BE INSTALLED SAFELY AT THE DESIRED THICKNESS WITHOUT RISK OF CHARRING OR FIRE.

GreenSeal 173 should not be used for exterior applications, as UV light will rapidly degrade the foam. Do not use near high or open flame. Do not apply when Relative Humidity is higher than 80%.

GreenSeal 173 must be covered with an approved 15-minute thermal barrier when used as insulation for residential or commercial buildings. Installation must comply with all applicable building codes. Consult your local building code official for approvals and recommendations.

SUBSTRATES: GreenSeal 173 is chemically & physically compatible with most common building materials including electrical wiring, wood, metal, concrete, plastic (PVC), copper, vinyl, and glass. It is the responsibility of the contractor to check substrate compatibility prior to starting of the job.

HOW SUPPLIED: Net weight per set is 950 pounds . A set of GreenSeal 173 consists of one (1) 55 gallon drum of 'A' component and one (1) 55 gallon drum of 'B' component.

STORAGE: GreenSeal 173 should be stored between 60° – 80° F out of direct sunlight. Do not allow material to freeze. Shelf Life for unopened containers is 6 months when stored properly.

SAFETY PRECAUTIONS: Health Considerations

This chemical system requires the use of proper safety equipment and procedures. Please follow the PolyGreen Solutions product SDS and Safety Manual for detailed information and handling guidelines.



- Consult the PolyGreen Solutions Safety Data Sheets (SDS)

For Your Protection: The information and recommendations in this publication are, to the best of our knowledge, reliable. Suggestions made concerning the products and their uses, applications, storage and handling are only the opinion of PolyGreen Solutions. Users should conduct their own tests to determine the suitability of these products for their own particular purposes and of the storage and handling methods herein suggested. The toxicity and risk characteristics of products made by PolyGreen Solutions will necessarily differ from the toxicity and risk characteristics developed when such products are used with other materials during a manufacturing process. The resulting risk characteristics should be determined and made known to ultimate end-users and processors.

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