

TECHNICAL DATA SHEET

Material Specification Criteria | Project Submittal Data

foamsulate™

An Accella Brand

FOAMSULATE 205

CLASS 1 CLOSED CELL POLYURETHANE SPRAY FOAM

Accella's Foamsulate™ 205 system is a two component, one-to-one by volume spray applied rigid polyurethane foam that provides a self-adhering, seamless high insulation value. Foamsulate™ 205 utilizes an EPA approved, zero ozone-depleting (zero ODS), blowing agent and is ASTM E-84 Fire Rated Class 1. Foamsulate™ 205 provides excellent insulation for general purpose insulation needs.

For proper use of this Accella insulating material or any polyurethane foam, please contact Accella Polyurethane Systems, LLC for further application information and any of the following codes or guidelines:

- CPI Fire Safety Guidelines for Use of Rigid Polyurethane and Polyisocyanurate Foam Insulation in Building Construction (AX230)
- International Building Code, (IBC), Chapter 26
- International Residential Code, (IRC), Section R314 and R806

ADVANTAGES:

- Superior Insulation Performance
- Controls Air Infiltration
- Air/Vapour Barrier at 2 inches (50mm)
- Controls Moisture Infiltration
- Structural Properties
- Ease of Application
- High closed cell content
- Zero ODP
- Seamless Insulation

TYPICAL PHYSICAL PROPERTIES:

LIQUID RESIN AS SUPPLIED	A	B
SPECIFIC GRAVITY @ 70°F	1.24	1.18
VISCOSITY (BROOKFIELD) CPS	250	700
AS CURED		
CORE DENSITY	2.1 lbs.ft³	ASTM 1622
COMPRESSIVE STRENGTH	25 psi	ASTM 1621
TENSILE STRENGTH	40 psi	ASTM D-1623 Type C
INITIAL R-VALUE AT 1 INCH (25mm)	6.5	-
CLOSED CELL CONTENT	> 90%	ASTM D-6226
DIMENSIONAL STABILITY	< 5%	ASTM D-2126
MOISTURE VAPOUR TRANSMISSION	1.3 perm at one inch	ASTME-96
AIR PERMEANCE	0.001 cfm/ft²@ 1.57 psf	ASTM E-283
FLAMMABILITY	Flame Spread <25	ASTM E-84

Note: The above values are average values obtained from laboratory experiments and should serve only as guidelines. Free rise core density should not be confused with overall density. Overall densities are always higher than free rise core densities and take into account skin formation, thickness of application, environmental conditions, etc.

SAFE HANDLING OF LIQUID COMPONENTS: When removing bungs from containers use caution, contents may be under pressure. Loosen the small bung first and let any built up gas escape before completely removing. B-component will froth at elevated temperatures. Avoid prolonged breathing of vapours. In case of chemical contact with eyes, flush with water for at least 15 minutes and get medical attention. For further information refer to "MDI-Based Polyurethane Foam Systems: Guidelines for Safe Handling and Disposal" publication AX-119 published by the Alliance For The Polyurethanes Industry, 1300 Wilson Blvd, Suite 800, Arlington, VA 22209.

STORAGE AND USE OF CHEMICALS: Cold chemicals can cause poor mixing, pump cavitations, or other process problems due to higher viscosity at lower temperatures. Storage temperatures should be 70-85°F for several days before use, and should not exceed 90°F. Do not store in direct sunlight. Keep drums tightly closed when not in use and under dry air or nitrogen pressure of 2-3 psi after they have been opened. Shelf life is six months from date of manufacture when stored in original unopened containers at 40-80°F.

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EQUIPMENT AND COMPONENT RATIOS: Polyurethane foam systems should be processed through commercially available spray equipment. Foamsulate™ 205 B-side (white drum) is connected to the resin pump and the Foamsulate™ 205 A (red or black drum) is connected to the isocyanate (A) pump. The proportioning pump ratio is 1 to 1 by volume. The pre-heater and hose temperature should be set to 120°F -135°F and must be able to maintain at least 130°F to the gun with output pressure maintaining 1,100-1,400 psi during spray.

APPLICATION GUIDELINES: Foamsulate™ 205 is suitable for application to most construction materials including wood, masonry, concrete, and metal. All surfaces to be sprayed with foam should be clean, dry, and free of dew or frost. All metal to which the foam is to be applied must be free of oil, grease, etc. Two inches should be the maximum thickness of each layer. Allow ten minutes between each pass to allow for cooling. Multiple layers can be applied to reach the desired thickness and R-value.

Substrate temperature at the time of Foamsulate™ 205 application should be between 50-120°F, the warmer the substrate, the better the adhesion. When substrates to be sprayed are cooler than 60°F, a thin quarter inch pass should be applied over the substrate with the second pass following as soon as the original pass is tack free. A maximum service temperature of Foamsulate™ 205 is 180°F.

As with all spray polyurethane foam systems, improper application techniques should be avoided. Examples of improper techniques include, but are not limited to, excessive thickness of SPF, off ratio material and spraying into or under rising foam. Potential results of improperly installed spray polyurethane foam include: dangerously high reaction temperatures that may result in fire and offensive odours that may or may not dissipate. Improperly installed foam must be removed and replaced with properly installed spray polyurethane foam.

Spray polyurethane foam insulation is combustible. High intensity heat sources such as welding or cutting torches must not be used in close proximity to any exposed polyurethane foam.

FINISHED FOAM PROTECTION: The finished surface of the sprayed polyurethane foam should be protected from the adverse effects of sunlight ultraviolet rays which can cause dusting and discoloration. Protective coatings designed for use with polyurethane foams are available from Accella.

HEALTH & SAFETY: Due to the reactive nature of these components, vapours and liquid aerosols present during application and for a short period thereafter must be considered, and appropriate protective measures taken, to minimize potential risks from overexposure through inhalation, skin, or eye contact. These protective measures include: adequate ventilation, safety training for installers and other workers, and use of appropriate personal protective equipment.

MANUFACTURED BY:

ACCELLA POLYURETHANE SYSTEMS, LLC
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(770) 607-0755 • PremiumSpray.com

EMERGENCY NOTIFICATIONS:

CHEMTREC : Material Leaks, Spills
or Fire (800) 424-9300

HEADQUARTERS:

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