

ULTRATITE 50 OC

TECHNICAL DATA SHEET NO MIX FORMULA

PRODUCT DESCRIPTION

UltraTite 50 OC is a two component, no mix open cell, spray applied, semi-rigid polyurethane foam system. This product is a fully water blown foam system with a low in-place density & does not contain CFC, HCFC, HFC or formaldehyde. Ultratite 50 OC has excellent adhesion to itself and can be installed on various substrates including but not limited to: Ply- wood, OSB, wood studs, concrete, metal studs, metal panels, & metal buildings. **For use in TYPE I,II,III,IV & V construction.**

TYPICAL PHYSICAL PROPERTIES¹ Evaluation Service Report UES ER-1011

Test Method	Property	Result
ASTM C518	Thermal Resistance (R-Value) @ 1"	3.7 @ 1"
ASTM D1622	Core Density	0.4 - 0.5 pcf
ASTM E96	Water Vapor Permeance	28 perms @ 1"
ASTM E2178	Air Permeance @ 75 Pa	<0.02 L/s-m2 @ 4"
ASTM D1623	Tensile Strength	3.71 psi
ASTM D2126	Dimensional Stability	-2% Change in Volume
ASTM E84	Flame Spread	25
ASTM E84	Smoke Development	450
AC377 Appendix X	Large Scale Fire: Ignition Barrier	Passed
NFPA 286	Large Scale Fire: Thermal Barrier	Passed
Appendix U	Oxygen Depletion Test	Passed, no ignition barrier needed
UL 94	Flammability Standard	HF-1
NFPA 285	Compliant with IBC for exterior walls. Types I - V building of any height	Passed
NFPA 259	Potential Heat	506 Btu/ft ² @ 1"
ASTM E970	Critical Radiant Flux	> 0.12 W/m ²
ASTM E90	STC	41 in a 2x6 wall
ASTM C243	NRC	0.75
ASTM C243	SAA	0.71

¹ Typical properties and characteristics are based on samples tested and are not guaranteed for all samples of this product. This data and information is intended as a guide and does not reflect the specification range for any particular property of this product.

² Contact UltraTite Solutions for assistance with alternate assemblies

ALTERNATIVE IGNITION BARRIER ASSEMBLIES: FIRE PROTECTIVE COATINGS/COVERINGS

IGNITION BARRIER			SPRAY-APPLIED POLYURETHANE FOAM PLASTIC INSULATION	MAXIMUM THICKNESS (INCH)	
Type	Thickness	Approx. Application Rate (Coatings Only)		Walls and Vertical Surfaces	Ceiling and Overhead Surfaces
DC315	7 mils WFT 4 mils DFT	0.5 gallon per 100 ft ²	Ultratite 50 OC	8"	14"

Fire-protective coatings and coverings shall be applied over all exposed SPF surfaces in accordance with the coating/covering manufacturer's instructions and this report

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THERMAL BARRIER

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Type	Thickness	Approx. Application Rate (Coatings Only)
No-Burn THB	14 mils WFT 9 mils DFT	115 SQFT Per gallon
DC315	14 mils WFT 9 mils DFT	115 SQFT Per gallon
Flame Control 60 - 60A	14 mils WFT 9 mils DFT	115 SQFT Per gallon

PROCESSING PARAMETERS

Pre-heater Temperature†	"A" 120 - 140°F "B" 120 - 140°F
Hose Temperature†	120 - 140° F
Pressure†	1200 - 1400 psi (dynamic)
Mix Ratio Parts	1 by 1 volume: "A" to "B"
Drum Temps	80 - 90° F

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STORAGE & USE OF CHEMICAL

Cold chemicals can cause poor mixing, pump cavitation or other process problems due to higher viscosity at lower temperatures. The storage temperature should be between 60°F - 85°F. Do not store in direct sunlight. Keep drums tightly closed when not in use. Verify material temperature with an infrared gun or a thermometer

EQUIPMENT & COMPONENTS

UltraTite 50 OC is formulated for spraying with a two component pump specifically designed for spray polyurethane foam systems. The B-drum is connected to the resin pump and the A-drum is connected to the isocyanate pumps. The plural component proportioner must be capable of supplying each component within ±2% of the desired 1:1 mixing ratio by volume. The dispensing temperature should be set between 120°F and 140°F to the spray gun. Drum temp should be 80°F prior to spraying.

SAFE HANDLING OF LIQUID COMPONENTS

Avoid prolonged breathing of vapors. In case of chemical contact with eyes, flush with water for at least 15 minutes and get medical attention. All contractors and applicators must use appropriate respiratory, skin and eye Personal Protective Equipment (PPE) when handling and processing spray foam (SPF) systems. Read and become familiar with available information prior to use this product. For further information refer to www.spraypolyurethanes.org; Health and Safety Product Stewardship Workbook for High-Pressure Application of SPF.

SHIPPING INFORMATION

55-gallon drum	"A" component - 500 lbs. "B" component - 435 lbs.
D.O.T. Classification; Liquid Plastic Material - NOIBN	Protect from freezing

APPLICATION RECOMMENDATIONS/CAUTIONS

- UltraTite 50 OC is designed for insulation in most standard construction configurations using common materials such as concrete, metal and wood products. Foam plastic installed in walls or ceilings may present a fire hazard unless protected by an approved, fire-resistant thermal barrier with a finish rating of no less than 15 minutes as required by building codes. Rim joist/header areas in accordance with the IRC® and IBC® may not require additional protection. Foam plastics must also be protected against ignition by code-approved materials in attic and crawl spaces, or as code-approved alternatives apply.
- SPF insulation is combustible. Appropriate signs shall be posted warning that all "hot work" such as welding soldering, and cutting with torches should not take place until a thermal barrier or approved equivalent is installed over any exposed polyurethane foam
- UltraTite 50 OC is a class III Vapor Retarder and may need an additional vapor retarder in certain building envelopes. Please refer to the IRC Table 402.5.1 and any applicable local building codes.
- Applicators should apply a minimum pass thickness of 1 inches, maximum pass thickness of 6-8 inches.
- Substrate must be at least 5 degrees above dew point, with best processing results when ambient humidity is below 80%
- Substrate must also be free of moisture (dew or frost), grease, oil, solvents and other materials that would adversely affect adhesion of the polyurethane foam. Substrate temp should be between 20°F and 120°F
- UltraTite 50 OC continuous service temperature is between -60°F and 180°F
- UltraTite 50 OC must not be used when the continuous service temperature above 180°F (82°C) and should not be used in contact with bulk water, below grade or to cover flexible ductwork.

Information herein is to assist customers in determining whether our products are suitable for their applications. We request that customers inspect and test our products before use and satisfy themselves as to contents and suitability. Nothing herein shall constitute a warranty, expressed or implied, including any warranty of merchantability or fitness, nor is protection from any law or patent inferred.