

ULC ER-41037

TECHNICAL DATA SHEET - Spray Polyurethane Foam Insulation / Air Barrier

WALLTITE v.5 is a purple, closed cell, medium density spray applied insulation and air barrier polyurethane foam that uses an HFO blowing agent with a low GWP (<1 Kg CO2 eq) and meets the requirements of CAN/ULC S705.1-18 standard. Available in two reactivity grades: WALLTITE v.5 Regular and WALLTITE v.5 Cold Temperature (CT). Unless specified, all references to WALLTITE v.5 in this Technical Product Data sheet refer to all grades.

The benefits of WALLTITE v.5 are its superior thermal resistance and its excellent air sealing ability. WALLTITE v.5 is intended for residential, commercial, industrial, and institutional building applications where insulation is required. It can be used above or below grade, for interior or exterior building envelope applications including exterior, cavity and foundation walls, between steel or wood framing, under floor slabs, in cantilevered areas and in specialized applications.

APPROVALS AND CREDENTIALS

- **ULC ER-41037** – Spray-Applied Medium density Rigid Polyurethane Foam Insulation
- **CAN/ULC S705.1-18** – WALLTITE v.5 meets the material standard CAN/ULC-S705.1 which is referenced in national and provincial building codes and is tested to the latest Long Term Thermal Resistance (LTTR) standards, CAN/ULC-S770-09 and S770-15
- **Low GWP (Global Warming Potential) <1 (Kg CO2 eq)** – WALLTITE v.5 utilizes a blowing agent reducing impact on global warming.
- **GREENGUARD and GREENGUARD Gold Certification** – WALLTITE v.5 meets the stringent requirements of GREENGUARD Gold, thus ensuring occupant safety through improved indoor air quality.



LTTR: Long Term Thermal Resistance** CAN/ULC-S770-09 and S770-15**

Thickness (mm)	Thickness (in)	R Value (ft ² ·hr·°F / BTU)	RSI (m ² ·K/W)	R Value (ft ² ·hr·°F / BTU.in)
50	1.97	11.06	1.95	5.6
75	2.95	17.05	3.00	5.8
100	3.94	23.12	4.07	5.9

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PHYSICAL PROPERTIES*

The following test data are from an independent laboratory and are compliant with material standard CAN/ULC S705.1-18

Physical Properties	Results		Test methods
Density (Core)	32.5 Kg/m ³	2.03 lb/ft ³	ASTM D1622
Compressive Strength	203 kPa	29 psi	ASTM D1621
Tensile Strength	267 kPa	39 psi	ASTM D1623
Air permeance @ 75 Pa 25mm thick sample	0.004 L/s.m ²		ASTM E2178-21
Open Cell Content	7 % by volume		ASTM D6226
Water Absorption	1.9 % by volume		ASTM D2842
Water Vapour Permeance 50 mm thick sample	56 ng/Pa.s.m ²		ASTM E96
Dimensional Stability, % volume change At -20°C At 80°C At 70°C, 97 ± 3% RH	-0.5 +1.0 +8.0		ASTM D2126
Flame Spread Classification** FS (S102) FS (S127)	≤ 500		CAN/ULC-S102 Including CAN/ULC-S127
Time to Occupancy***	25 hours		CAN/ULC-S774
Hot Surface Performance	No apparent degradation when exposed to 93°C for 96 hours		ASTM C411
Fungi Resistance	No growth		ASTM C1338

APPLICATION

Licensing of installers is required by the CAN/ULC-S705.2 Installation Standard. WALLTITE v.5 is installed by applicators that are licensed through BASF Canada's Quality Assurance and Training Program (QATP) and certified by Caliber Solutions Inc. who is responsible for delivering the Quality Assurance Program (QAP). WALLTITE v.5 is purple and is expected to change to grey then yellow upon exposure to UV (sunlight). The colour at the core may vary based on application thickness, number of passes and time between passes.

Grades	Ambient temperatures
WALLTITE v.5 Regular	5°C to 40°C (41°F to 104°F)
WALLTITE v.5 CT	-10°C to 10°C (14°F to 50°F)

Time between passes

WALLTITE v.5 must be applied at a minimum of 15 mm and no more than 50 mm (2 in) thick per pass. Not allowing the minimum required cooling time raises the risk of post growth, scorching and/or fire.

Number of passes	Single pass thickness	Total thickness	Regular wait time between passes	CT wait time between passes
2	2 in	4 in	0 minutes	15 minutes
3	2 in	4 to 6 in	15 minutes	15 minutes
4	2 in	6 to 8 in	15 minutes	30 minutes

WALLTITE v.5 Regular and CT: A maximum of 4 passes to a total depth of 203.2mm (8") can be applied in a 24-hour period.

WALLTITE v.5 can be installed and left without any cladding for up to 6 months.

For application information, please consult the *BASF Canada Application Guidelines for WALLTITE v.5 Insulation / Air Barrier Material*

TECHNICAL ASSISTANCE: Toll-Free: 1-866-474-3538 - <https://walltite.basf.ca/home/downloads>

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WALLTITE® is registered trade-mark of BASF Canada Inc. All other products are trade-marks or registered trade-marks of their respective companies.

WALLTITE® v.5 COMPONENTS STORAGE AND PROPERTIES

WALLTITE v.5 is sold to licensed contractors in drums, totes, or bulk tankers. It consists of two components: WALLTITE v.5 Resin and ELASTOSPRAY 8000A Isocyanate.

	WALLTITE v.5 Resin	ELASTOSPRAY 8000A Isocyanate
Colour	Purple	Brown
Shelf Life	6 months	12 months
Storage Temperature Recommendations	15°C-25°C (59°F-77°F)	15°C-25°C (59°F-77°F)
Drum Mass	220 kg (485 lbs.)	227 kg (500 lbs.)
Viscosity – mPa·s @ 25°C (77 °F)	320 ± 100	200 ± 100
Specific Gravity @ 25°C (77°F)	1.20	1.22
Ratio (Parts by Volume)	100	100
Recycled content	14%	-

HEALTH, SAFETY AND TOXICITY CONSIDERATIONS – HANDLING RECOMMENDATIONS

Do not apply WALLTITE v.5 more than 50 mm (2 in) per pass and allow appropriate cooling times between passes (see the Application section, above).

WALLTITE v.5 Resin	ELASTOSPRAY 8000A Isocyanate
<ul style="list-style-type: none"> • Contains a low boiling point blowing agent • Use personal protective equipment (see SDS) • Before opening, unscrew the bung slowly to release the gas pressure in the drums • Avoid all contact with skin 	<ul style="list-style-type: none"> • Use personal protective equipment (see SDS) • Avoid all contact with skin and eyes and do not inhale the vapours • Do not store in a humid environment • In case of spills, use sand or absorbing material (not sawdust) • For larger spills, contact BASF Canada at 1-800-454-2673, or any agency specialized in chemical damage control (e.g., CANUTEC at 613-996-6666)

Installation Safety

At all times while spraying, properly fitting breathing apparatus supplying fresh air **must** be worn by the installers and others working within 10 meters (33 feet) of the installer. Protective gloves, overalls, eye protection, safety shoes and hard hats must also be worn while spraying. While spraying, always provide mechanical ventilation with a minimum 0.3 air changes per hour and continuing for 25 hours following installation. People with known respiratory allergies must avoid exposure to the isocyanate component. If inhalation of vapours occurs, remove the person from the working area to breathe fresh air and if breathing is still difficult call a physician. Avoid contact with eyes, skin and clothing. In case of eye contact, immediately flush with large amount of water for at least 15 minutes and call a physician immediately. In case of skin contact, wash area with soap and water. Wash soiled clothing before reuse.

Fire Hazard

Fires involving either component may be extinguished with carbon dioxide, dry chemical, or an inert gas. Personnel fighting the fire must be equipped with self-contained breathing apparatus.

Precautions/Limitations

Do not install in locations where a non-combustible insulation is required. Keep minimum distances of 75 mm (3 in) from heat emitting devices. When installed inside a building protect foam in accordance with the building code requirements using a layer of drywall or a suitable thermal barrier.

*These physical property values are typical for this material as applied at our development facility under controlled conditions. WALLTITE v.5 performance and actual physical properties will vary with differences in application (i.e. ambient conditions, process equipment and settings, material throughput, etc.). As a result, these published properties should be used as guidelines solely for the purpose of evaluation. Physical property specifications should be determined from actual production material.

**Numerical flame spread ratings are not intended to reflect hazards presented by this or any products made from this material under actual fire conditions. WALLTITE v.5 should not be left exposed and must be protected by a thermal barrier.

***The volatile organic compound (VOC) emissions under consideration were measured with an assumed room ventilation rate of 0.3 air changes per hour as per the NBC requirements for new construction.

****The Long-Term Thermal Resistance values are the design value used for WALLTITE v.5 as per CAN/ULC-S705.1-18, paragraph 5.5.6.2.

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