



TECHNICAL DATA SHEET

Heatlok Soya HFO/Airmétic Soya HFO/Polarfoam Soya HFO are two component, low GWP, closed cell, spray applied, rigid polyurethane foam systems. This foam product has been tested by an independent recognized laboratory and is the first product that surpasses the requirements outlined in the most recent and strenuous standard CAN/ULC S705.1 "Standard for thermal insulation - Spray applied rigid polyurethane foam, medium density - Material Specification". Heatlok Soya HFO/Airmétic Soya HFO/Polarfoam Soya HFO material complies with the requirements of National Building Code of Canada. This product is commonly used as a thermal insulation product, air barrier, vapour barrier for interior, exterior applications above and below grade. Heatlok Soya HFO/Airmétic Soya HFO/Polarfoam Soya HFO uses recycled plastic materials, rapidly renewable soy oils, and 4th generation blowing agent with zero ozone depleting potential and < 1 global warming potential. This product meets all the requirements of the Paris, Kyoto and Montreal protocols. Heatlok Soya HFO/Airmétic Soya HFO/Polarfoam Soya HFO exceeds the highest requirements for VOC with the GREENGUARD GOLD certification. Heatlok Soya HFO/Airmétic Soya HFO/Polarfoam Soya HFO is applied exclusively by The Canadian Urethane Foam Contractor's Association (CUFCA) licensed installers and contractors in accordance with the standard CAN/ULC S705.2.

| PHYSICAL PROPERTIES - PER CCMC LISTING 14078-L | | | |
|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------|---------------------------|
| ASTM D 1622-14 | Apparent Core Density | 2.10 lb/ft ³ | 33.7 kg/m ³ |
| CAN/ULC S770-09 | Long Term Thermal Resistance LTTR 75 mm 50 mm | R-17 R-11 | 2.96 RSI 1.86 RSI |
| ASTM D 1621-16 | Compressive Strength (@ 10% deflection) | 24.8 lb./in ² | 171 kPa |
| ASTM D 1623-09 | Tensile Strength | 58.2 lb./in ² | 401 kPa |
| ASTM D 6226-15 | Open-Cell Content | 0 % | |
| ASTM D 2842-12 | Water Absorption by volume | 0.64 % | |
| ASTM E 96-16 | Water Vapour Permeance (50 mm thick, top skin removed) | 0.89 perm | 51 ng/Pa.s.m ² |
| ASTM E 2178-13 | Air Permeance @ 75 Pa (30.7 mm thick, top skin removed) | 0.0017 L/(s.m ²) | |
| CAN/ULC S102 | Flame Spread Index (corner wall test) Required and Declared Value (building code) | 245 | |
| ASTM D 2126-15 | Dimensional Stability (28 days) (% volume change, sample without any substrate) @ -20°C @ +80°C @ +70°C & 97±3%R.H. | -1.4 +1.3 +9.4 | |
| CAN/ULC S774-09 (R2014) | Time of Occupancy (VOC) | 1 day | |
| UL Greenguard | Interior Air Quality | Certified Gold | |
| ASTM C 1338-14 | Fungi Resistance | No Fungal Growth | |

| PHYSICAL PROPERTIES - Additional Testing | | | |
|------------------------------------------|-----------------------------------------------------|--------------|----------------------|
| CAN/ULC S770-03 | Long Term Thermal Resistance LTTR 75 mm 50 mm | R-19 R-12 | 3.26 RSI 2.03 RSI |

| RECYCLED & RENEWABLE CONTENT | |
|------------------------------|------|
| Recycled Content | 18 % |
| Renewable Materials Content | 4 % |

| REACTIVITY PROFILE | | | |
|--------------------|-----------|----------------|---------------|
| Cream Time | Gel Time | Tack Free Time | End of Rise |
| 0 - 1 seconds | 3 seconds | 5 - 6 seconds | 5 - 6 seconds |

| LIQUID COMPONENT PROPERTIES* | | |
|------------------------------------------------------|-----------------------|------------------------------------------------------|
| PROPERTY | ISOCYANATE | RESIN |
| Colour | Brown | Heatlok Soya HFO: Blue Polarfoam Soya HFO: Orange |
| Viscosity @ 25°C | 150 - 350 cps | 200 - 300 cps |
| Specific Gravity | 1.20 - 1.24 | 1.19 - 1.21 |
| Shelf Life* | 6 months | 6 months |
| Mixing Ratio (volume) | 100 | 100 |
| Vapour Pressure @ 25°C | 10 ⁻⁷ psi | 8 - 9 psi |
| Components system storage temperature recommendation | 15 @ 25°C (59 @ 77°F) | 15 @ 25°C (59 @ 77°F) |

*See SDS for more information.

| RECOMMENDED PROCESSING PROCEDURES | | |
|--------------------------------------------------------------------------------|-----------------------------------------------------|-------------------------------|
| Mixing Ratio A/B (volume) | 1/1 | |
| Mixing Dynamic Pressure (minimum) | 5516 kPa | 800 psi |
| Moisture Content of Substrate | < 19% | < 19% |
| Maximum Thickness Per Pass | 50 mm | 2" |
| Maximum Thickness of Successive Passes | 100 mm | 4" |
| Minimum cooling time period before applying over 100 mm (4") thick application | 4 h | |
| PRODUCT VERSION | APPLICATION TEMPERATURES (AIR, SUBSTRATE, & CURING) | LIQUID TEMPERATURE AT THE GUN |
| Summer Version | 30 @ 5°C (41 @ 86°F) | 35 @ 46°C (95 @ 115°F) |
| Winter Version | 5 @ -10°C (41 @ 14°F) | 38 @ 49°C (100 @ 120°F) |

General Information: It is recommended that the foam be covered with an approved thermal barrier in accordance with the applicable building code when used in buildings and cover by a UV coating when used outside. This product should not be used when the continuous service temperature of the substrate is outside the range of -60°C to 80°C (-76°F to 180°F). Do not apply excessive thickness in one application it may cause spontaneous combustion of the foam hours after the application. Respect the recommended procedures. Airmétic Soya HFO is the French trade name of Heatlok Soya HFO. Heatlok Soya HFO is green in color. Polarfoam Soya HFO is peach in color.

Disclaimer: The 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. All patent rights are reserved. The foam product is combustible and must be protected in accordance with applicable codes. Protect from direct flame and spark contact, around hot work for example. The exclusive remedy for all proven claims is replacement of our materials.



ZeroODS