

HEATLOK[®] ECO TECHNICAL SHEET

Heatlok[®] ECO is a fully formulated two component system, designed to be used in conjunction with Isocyanate part A to produce a polyurethane foam for spray application. **Heatlok[®] ECO** is made with Huntsman's latest polyester polyols technology which uses waste PET (polyethylene terephthalate) bottles. It also uses the latest environmentally safe blowing agent, a blowing agent with 1 GWP and 0 ODP. **Heatlok[®] ECO** provides good fire properties, fantastic heat resistant (thermal conductivity), and excellent processibility.

FOAM PHYSICAL PROPERTIES			
ASTM D1622	Core Density	kg/m ³	30-34
AS 2498.3	Compressive Strength	kPa	>80
JIS K 7225	Moisture permeability (MVTR)	ng/(m·s·Pa)	< 9
ASTM D2842	Water absorption (% by volume)	%	<3

FIRE TEST RESULTS		
AS1530.3	Method for Fire tests on Building materials, components, and structure's part 3: Simultaneous determination of Ignitability, Flame propagation, Heat release and Smoke release.	16/0/3/5

THERMAL PERFORMANCE		
C518-2021	Steady-state thermal transmission properties by means of the heat flow apparatus.	0.024W/mK

REACTIVITY PROFILE			
Cream Time	Gel Time	Tack Free Time	End of Rise
3-5 sec	6-10 sec	7-13 sec	18-22 sec

LIQUID COMPONENT PROPERTIES		
PROPERTY	A-PMDI ISOCYANATE	RESIN
Color	Brown	Light brown
Viscosity @ 25°C	180-220cps	250-350cps
Specific Gravity	1.24	1.22
Shelf Life of unopened drum properly stored	12 months	6 months
Storage Temperature	15-25°C	15-25°C
Mixing Ratio (volume)	1:1	1:1

*See SDS for more information

RECYCLED & RENEWABLE CONTENT	
Polyol Recycled Content	20%
Recycled PET bottles used to produce 1kg polyol (11g bottle)	18

RECOMMENDED PROCESSING PARAMETERS*	
Initial Primary Heater Setpoint Temperature	38 - 48°C
Initial Hose Heat Setpoint Temperature	38 - 48°C
Initial Processing Setpoint Pressure	800 - 1100 psi
Substrate & Ambient Temperature	> 10°C
Moisture Content of Substrate	≤19%
Moisture Content of Concrete	Concrete must be cured, dry, and free of dust and form release agents.

*Foam application temperatures and pressures can vary widely depending on temperature, humidity, elevation, substrate, equipment, and other factors. While processing, the applicator must continuously observe the characteristics of the sprayed foam and adjust processing temperatures and pressures to maintain proper cell structure, adhesion, cohesion, and general foam quality. It is the sole responsibility of the applicator to process and apply this product within specification. It may be necessary to split temps due to ambient temps and material viscosity.

RECOMMENDED PASS THICKNESS LIMITS

Recommended Single Pass Thickness	20 – 30 mm
Recommended Dual Pass Thickness	40 – 60 mm

Heatlok® ECO must be sprayed at a minimum thickness of 20 mm per pass. Applicators should limit the application of this product to no more than a thickness of 30 mm per pass (after expansion) to avoid fire hazards (including spontaneous combustion) resulting from excessive heat generation. A second layer may be applied immediately after the first one has fully risen.

If subsequent passes are needed, applicators should wait until the core temperature of the foam has dropped below 38°C to allow any reaction heat to dissipate from the prior applications before attempting to reapply the product.

General Requirements: Equipment must be capable of delivering the proper ratio (1:1 by volume) of Isocyanate part A and polyol blend at adequate temperatures and spray pressures. 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. This product should not be used to cover flexible ductwork.

This product must not be used when the continuous service temperature of the substrate or foam is below 10°C. This product must be separated from the interior of the building by an approved thermal barrier or an approved finish material equivalent to a thermal barrier in accordance with applicable codes.

Warranty

When installed properly in accordance with instructions, the company warrants that the properties of the product meet product specifications as outlined in the technical data sheet. Save and except any exclusions referenced in the warranty.

Technical

Huntsman building solutions and Pacific Urethanes provide support on both technical and regulatory issues.

Packaging and storage

- Packaging – 200lt steel drum
- Component A - 250kg per drum, Isocyanate Part A
- Component B - 210kg per drum, Heatlok ECO

Certification

Heatlok ECO is currently going through CodeMark certification and is expected to be certified by June 2024.



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.



Contact: Pacific Urethanes
Call: 1300 736 963
Email: sprayfoam@pacificurethanes.com

HUNTSMAN
BUILDING SOLUTIONS