QUANTUM Chemical
High Performance Coatings

THERMAL BARRIER: Spray Foam Insulation
Intumescent Fire Protection

SafeCoat® TBI

DESCRIPTION

SafeCoat® TBI is a single component latex intumescent fire retardant coating ideally suited for exposed interior SPF (Spray Polyurethane Foam). It limits thermal penetration by expanding to many times the original dry film thickness when exposed to heat. This expanded material forms a char which insulates the substrate against heat, and reduces available oxygen to the surface.

APPLICATION INSTRUCTIONS

Surface Preparation:
All surface preparation should be carried out in accordance with good painting practices. Ensure surface is clean and dry before application. Preferably the foam surface should be textured to ensure good adhesion.

Application:
For optimal finish, apply **SafeCoat® TBI** using airless spray equipment. Remove both the gun and pump filters prior to spraying.

Apply 3 to 4 mil dust coat with the **SafeCoat® TBI** to prime the surface and allow to flash off prior to application of heavier coats to prevent runs and ensure adhesion.

SafeCoat® TBI is a heavier body paint requiring mechanical/shear mixing for best product viscosity for spraying. Use reliable and consistent pumping equipment to achieve optimal results. Apply each coat uniformly to entire surface to obtain smoothest finish.

Surface and ambient temperature must be maintained at greater than 50° F (10°C) during application and must remain so for at least 48 hours following the application.

Ensure the proper QC Form is filled out and provided to the site inspector and Quantum Chemical. The form is available from the distributor or the Quantum Chemical website at www.quantumchemical.com.

Clean Up: All application tools can be cleaned with water. If product has dried on, use hot soapy water to soften and remove it.

Precautions: **SafeCoat® TBI** is not "WHMIS" regulated nor is it subject to the "Transportation of Dangerous Goods Act and Regulations". See SDS for detailed precautions. **PROTECT FROM FREEZING** as freezing will damage the product.

PROPERTIES

Coating Type	Latex
Finish	Off-white, Flat Finish
Color	Standard: Off-white; Special: Black
Specific Gravity	11.6 lbs/US Gallon or 1.39 g/mL
Solids by Weight	76% **Solids by Volume** 67%
Coating VOC	<1 g/L
Dry Time (Touch):	1-2 hours (varies with mil thickness, temperature and humidity)
Thickness	17 mils total WFT including the primer coat (11.39 mils DFT)
Flash Point	No Flash
Storage Limits	Keep from freezing (33°-100° F; 1-38°C. Colder product will be thicker; warmer will be thinner.)
Shelf Life	12 months
Packaging	Available in five-gallon pails Special order: 55-gallon drums

SafeCoat® TBI is intended for **interior use only**.

PRODUCT WARRANTY

Recommendations for the use of our products are based on tests carried out at government approved labs. Manufacturer and seller are not responsible for results where the product is used under conditions beyond our control. The purchaser of this product must rely on his own judgement in determining suitability for his purpose, and in applying directions as to handling and use. Quantum makes no warranty, expressed or implied, except that if this product proves on inspection to be defective, Quantum will replace such quantity of the product proven to be defective or refund the purchase price of defective product. Labour costs and other consequential damages are hereby excluded. No representative or purported agent of Quantum has the authority to change this warranty. The information contained herein is subject to change without notice. If in doubt, contact your Quantum Representative for current Technical Data Sheets (TDS).

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THERMAL BARRIER: Spray Foam Insulation
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SafeCoat® TBI Thermal Barrier Test as per the Test Standards below, was completed at:
Intertek: 16015 Shady Falls Road, Elmendorf, Texas 78112

TEST METHOD	REPORT NUMBER	TEST RESULT
The assembly was evaluated in accordance with the below: **CAN/ULC S145: 2018,** Standard Methods of Fire Tests for the Evaluation of Protective Coverings for Foamed Plastic Insulation – Full-Scale Room Test **CAN/ULC 9705-13-R2018,** Fire Tests – Full-Scale Room Test for Surface Products (ISO 9705:1993, MOD)	G105348565SAT-003 RO **TEST DATE** 06/29/23 **REPORT ISSUE DATE** 08/01/23	10-Minute Classification

SUMMARY OF RESULTS

The assembly tested in this report achieved a **10-minute classification** per the requirements of acceptance for protective coverings for foam plastic insulation on a full-scale room test. This allows the **SafeCoat® TBI** to be used as an 'alternative solution' to the following substrates in combustible construction applications as specified in the National Building Code of Canada, 2015 Edition.

Spray Foam Insulation 10-Minute Thermal Barrier: Alternative Solutions such as **SafeCoat® TBI,** can be used in lieu of OSB, Particleboard, MDF, Oak-Veneered Plywood, Spruce Plywood, Douglas Fir Plywood, and Insulating Wood Fibreboard. Fibreboard is the accepted benchmark for Nunavut, British Columbia, Nova Scotia, NWT, Manitoba and Alberta, allowing this 'alternative solution' to be used directly over cavity spray foam insulation. It can also be used in closed spaces such as attics, crawl spaces, etc. and is recommended over spray foam insulation as added protection in uses that are not required by code.

Currently the International Building Code (IBC) requires a 15-minute Thermal Barrier as tested to the NFPA 286. This is also Quebec's benchmark. The AHJ can request a 10, 15, or 20-minute thermal barrier at their own discretion. Approval by the AHJ should always be sought prior to using this product.

The NFPA 286 (15-Minute IBC Standard) on spray foam insulation with **SafeCoat® TBI** is currently pending at the Intertek Test Facility in BC and this report data will be updated as soon as that testing and final test report are received from Intertek.