

ADCOTHERM™ PIB 1 Black

Primary Seal for Dual-Seal Horizontal Assembly

Description

ADCOTHERM™ PIB 1 is a black polyisobutylene based sealant that exhibits excellent long-term stability and remains permanently flexible, even at low temperatures. Like all ADCOTHERM™ PIB sealants, ADCOTHERM™ PIB 1 exhibits low argon permeability and inherently low moisture vapor transmission along with excellent adhesion to aluminum, stainless steel and tin-plated steel spacer substrates.



Basic Use

ADCOTHERM™ PIB 1 is specifically formulated to be used as a primary sealant in insulating glass units which are produced via horizontal or stacked methods. PIB 1 compression properties have been optimized to provide sufficient wet-out after pressing while minimizing over-compression issues in a bottom-of-the-stack unit. ADCOTHERM™ PIB 1 exhibits reduced flow versus other PIB offerings when submitted to a set pressure.

ADCOTHERM™ PIB 1 has very low moisture vapor transmission rates (MVTR) and gas permeability rates. Properly constructed dual-seal units incorporating ADCOTHERM™ PIB 1 will retain argon insulating gas and maintain a dry interior unit airspace for decades. Insulating glass units produced with ADCOTHERM™ PIB 1 routinely pass ASTM E2188, E2189, E2190 (HIGS) standards.

ADCOTHERM™ PIB 1 is designed for use on manual extrusion equipment. PIB 1 may be used with most commercially available urethane, silicone, polysulfide, or butyl hot melt insulating glass secondary sealants.

Safety

Prior to working with this or any product consult product label and Material Safety Data Sheet (MSDS) for necessary health and safety precautions.



Features	Benefits
Superior compression resistance	Allows for stacking of window units during build without increased risk of failure
Low moisture vapor transmission rate (MVTR)	Increased unit life expectancy
Excellent resistance to weathering	Does not degrade upon exposure to environmental conditions
Low gas permeability	Increased argon gas retention beyond industry standards
Excellent adhesion to glass, stainless, aluminum, tin-plated steel, and many plastics	Can be used with all commercially accepted metal spacer systems and most plastic spacer systems
Ultra low volatile content	No chemical fogging. No discoloration of low-e coatings

Packaging

ADCOTHERM™ PIB 1 is available in the following standard packages:

Part #	Physical Form	Package	Weight
PB-040B-60	15.0 lb (6.8kg) slug	4 slugs/case	60 lb

Storage and Shelf Life

Store material in original unopened packaging at temperatures between 40°F-100°F. Shelf life is 24 months when stored as recommended.

CAUTION: All statements and technical information in this document are based on tests or data that ADCO believes is reliable. However, ADCO does not warrant or guarantee the accuracy or completeness of this information. The user has sole knowledge and control of factors that can affect the performance of ADCO's products in the user's intended application. It is the user's responsibility to conduct tests to determine the compatibility of ADCO's product with the design, structure, and materials of the user's end product and the suitability of ADCO's product for the user's method of application and intended use. The user assumes all risk and liability arising out of such use.

Limitations

- ADCOTHERM™ PIB 1 is not intended for use as a structural sealant.
- ADCOTHERM™ PIB 1 is not intended for use on fully-automated, high-volume extruders.
- ADCOTHERM™ PIB 1 is not resistant to attack by solvents, oils, and plasticizers. When constructing IG with silicone secondary sealants, care must be taken to insure that the glazing environment (including setting blocks, compression gaskets, glazing sealants, and weatherproofing sealants) is free from solvents, oils and plasticizers. These chemicals can migrate through silicone secondary sealants and attack the primary sealant resulting in premature IG unit failure.
- The surfaces to be bonded must be dry, clean and free from dust and grease. Glass surfaces should be thoroughly cleaned by hand or machine with non-film forming, low residue detergent and rinsed thoroughly with clean hot water.

Glazing Compatibility

It is recommended that glazing materials be tested for compatibility and that all units be glazed in accordance with GANA (Glass Association of North America) and IGMA (Insulating Glass Manufacturers Alliance) recommendations. Contact with any solvent, oil, or plasticizer-containing glazing materials should be avoided.

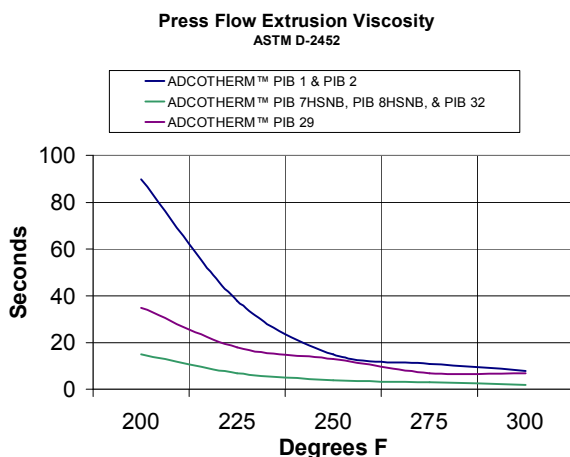
Performance Standards

Insulating glass units incorporating ADCOTHERM™ PIB 1 routinely meet the following specifications:

- ASTM E 774
- ASTM E 2188, E2189, E2190 (HIGS)
- CGSB 12.8
- EN 1279 (Part 1-3)

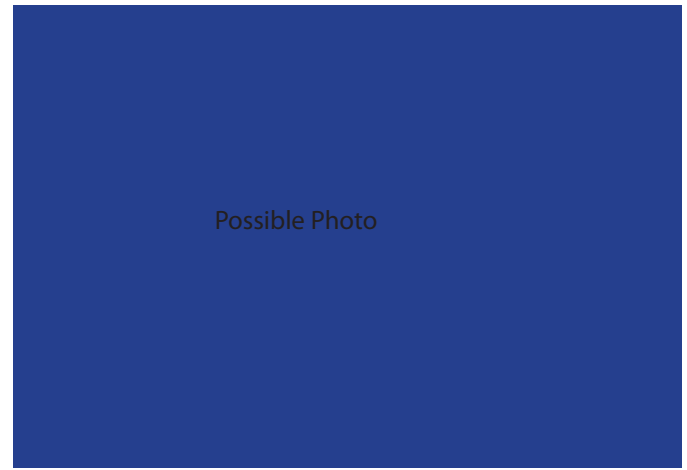
Application Instruction

See ADCOTHERM™ PIB Application Guidelines



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WARRANTY: ADCO warrants its products to conform to ADCO's specifications at the time of sale when tested according to ADCO standards. If a product is proven to be defective when tested according to ADCO standards, ADCO will, at its option, refund the purchase price or replace or repair the defective product. THIS LIMITED WARRANTY IS THE BUYERS SOLE AND EXCLUSIVE REMEDY AGAINST ADCO AND IS IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. In no event shall ADCO be liable for any special, incidental, consequential, or punitive damages arising out of any claims whether based on negligence, contract, warranty, strict liability or otherwise.



Technical Data

Performance Properties		
	Typical Values	Test Method
Moisture Vapor Transmission	0.2 g/m ² /24 hr	ASTM F1249 2mm thickness
Argon Diffusion	0.02 L/m ² /24h/ 760mm	ASTM D3985 3mm thickness
Press Flow Extrusion Viscosity	26 seconds	ASTM D2452 110°C (230°F), 8.6mm orifice
Physical Properties		
Cone Penetration	45 dmm	ASTM D217, 150g added load
Solids Content	100%	
Specific Gravity	1.16	ASTM D71
Weight per gallon	9.66 lb	
Application Properties		
Service Temperature	-45 to 80°C (-50 to 176°F)	
Suggested Application Temperature	110 to 140°C (230 to 285°F)	

NOTE:

The foregoing information is published as general information only. The listed properties and performance characteristics are typical values and are not to be interpreted as manufacturing specifications.

