

Insulating Glass-Sealant PIB-29

Black Primary Seal for Commercial IG

Description

Insulating Glass-Sealant PIB-29 is a black polyisobutylene based sealant that exhibits excellent long-term stability and remains permanently flexible, even at low temperatures. Like all **Insulating Glass-Sealant PIB** sealants, **Insulating Glass-Sealant PIB-29** 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

Insulating Glass-Sealant PIB-29 is specifically formulated to be used as a primary sealant in insulating glass units for commercial construction. **PIB-29** is compounded with high levels of carbon black to provide maximum protection in exposed application such as direct glazing.

Insulating Glass-Sealant PIB-29 has very low moisture vapor transmission rates (MVTR) and gas permeability rates. Properly constructed dual-seal units incorporating **Insulating Glass-Sealant PIB-29** will retain argon insulating gas and maintain a dry interior unit airspace for decades. Insulating glass units produced with **Insulating Glass-Sealant PIB-29** routinely pass ASTM E2188, E2189, E2190 (HIGS) standards.

Insulating Glass-Sealant PIB-29 offers high application rates without sacrificing strength performance. Optimized for performance on European assembly equipment (Bystronic and Lisecc), **Insulating Glass-Sealant PIB-29** will also run well on manual extruders. **PIB-29** may be used with most commercially available urethane, silicone, polysulfide, or butyl hot melt insulating glass secondary sealants.

Health & Safety

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

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CAUTION: All statements and technical information in this document are based on tests or data that Royal believes is reliable. However, Royal 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 Royal's products in the user's intended application. It is the user's responsibility to conduct tests to determine the compatibility of Royal's product with the design, structure, and materials of the user's end product and the suitability of Royal's product for the user's method of application and intended use. The user assumes all risk and liability arising out of such use.



Features

Low moisture vapor transmission rate (MVTR)

Excellent resistance to weathering

Low gas permeability

Excellent adhesion to glass, stainless, aluminum, tin-plated steel, and many plastics

Ultra low volatile content

Lower press flow viscosity

Benefits

Increases unit life expectancy

Does not degrade upon exposure to environmental conditions

Increases argon gas retention beyond industry standards

Can be used with all commercially accepted metal spacer systems and most plastic spacer systems

No chemical fogging. No discoloration of low-e coatings

Suitable for high-volume fully automated production lines

Packaging

Insulating Glass-Sealant PIB-29 is available in the following standard packages:

Part #	Physical Form	Package	Weight
PB-059B-58	14.5 lb (6.6 kg) slug	4 slugs/case	58 lb/ case
PB-059B-430S	Solid drum	Steel drum	430 lb

Storage and Shelf Life

Store material in original unopened packaging at temperatures between 4°C to 38°C (40°F to 100°F). Shelf life is 24 months when stored as recommended.

Limitations

- **Insulating Glass-Sealant PIB-29** is not intended for use as a structural sealant.
- **Insulating Glass-Sealant PIB-29** 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.

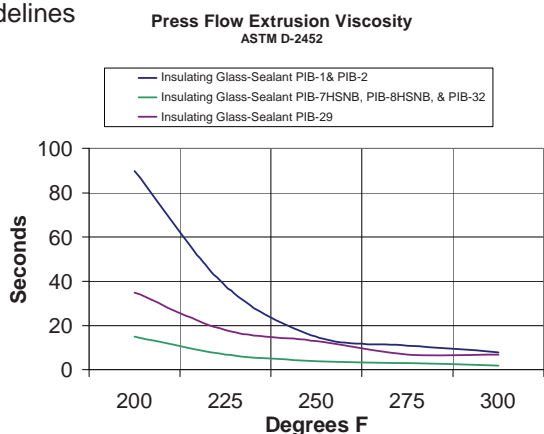
Performance Standards

Insulating glass units incorporating **Insulating Glass-Sealant PIB-29** 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 **Insulating Glass-Sealant PIB** Application Guidelines



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WARRANTY: Royal warrants its products to conform to Royal's specifications at the time of sale when tested according to Royal standards. If a product is proven to be defective when tested according to Royal standards, Royal 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 ROYAL 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 Royal 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		
Property	Typical Value	Test Method
Moisture Vapor Transmission	0.09 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	13 seconds	ASTM D2452 110°C (230°F), 8.6mm orifice
Service Temperature	-45°C to 80°C (-50°F to 176°F)	
Physical Properties		
Cone Penetration	55 dmm	ASTM D217, 150g added load
Solids Content	100%	
Specific Gravity	1.10	ASTM D71
Weight per gallon	9.2 lb	
Application Properties		
Suggested Application Temperature	100°C to 130°C (212°F to 265°F)	

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

IGMA MEMBER
INSULATING GLASS MANUFACTURERS ALLIANCE



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