DATASHEET - DOUBLE-SIDED TAPES

Double-Sided Acrylic Foam Adhesive 21150

Product Description: The 21150 acrylic foam double-sided adhesive is a white product with a rigid foam constructed from acrylic monomer esters covered with high performance fixed term acrylic adhesive on both sides, designed for superior adhesive on high energy surfaces.

The 21150 adhesive closed cell foam body has been developed to provide the following characteristics:

• Great forming and stretching

• High resistance to degradation

• Good performance in peel 90 degrees

• Excellent T-block performance and dynamic shear and cleavage the 200µ green liner provides good product structuring with ease of detachment.

Product construction: : 1- High performance acrylic adhesive design general purpose on high energy surfaces.

2- White closed cell acrylic esters foam;

3- Green PE Liner 190u.

Physical Properties:

Thickness: 1.10 mm +/- 10%

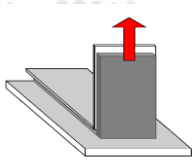
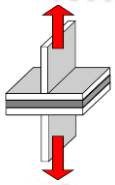
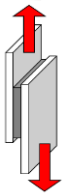
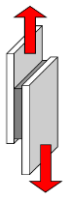
Tape density: 0.770 kg / lt +/- 7%

Typical cutting dimensions:

Characteristic	Dimensions	Standard tolerance
Width	From 5 mm	+/- 0.5 mm
Length	Up to 120 meters	- 0 , + 1%
Note: Special cutting conditions are evaluated upon request.		

Rua Manoel Francisco da Costa, nº 4500 - João Pessoa
Jaraguá do Sul – SC - Brasil
89257-407 | www.bold.net | +55 47 3274-6500

Typical performance in the laboratory:

Properties	Test	Result
	90° degree stainless steel adhering 20 mins 72 hours T.A. ME 02	 5.3 Kgf/ 25.4 mm 10.0 Kgf/ 25.4 mm
	Normal aluminum voltage 72 hours T.A. ME 01	55.0 Kgf/6.45 cm²
	Dynamic shear stainless steel 72 hours T.A. ME 03	35.0 Kgf / 6.45 cm²
	Static shear stainless steel 3.22 cm² for 10000 minutes ME 04	1500 grams 1000 grams 500 grams
	Resistance to solvents and detergents	No changes detected
	Temperature resistance	From - 40 to 120 °C
	UV resistance and weather	Discharge

Note: The values presented above are obtained in tests in the company's laboratory, using internal methods and do not serve as a parameter for product release, because they are typical results

Important instructions:

- Perform hands-on tests to certify the effectiveness of the product.
- Surfaces must be clean and free of oils, greases, moisture, dust, dirt, etc. A good product for surface cleaning is isopropyl alcohol.
- A uniform pressure of 1.5 kg per cm² should be applied to promote good contact between the material to be glued and the tape. The ideal temperature range of application of these products is between 20 and 40 °C, and it is not recommended to apply these tapes at temperatures below 15 °C, because the adhesive does not flow in this condition and can generate a poor contact area.

Rua Manoel Francisco da Costa, nº 4500 - João Pessoa
Jaraguá do Sul – SC - Brasil
89257-407 | www.bold.net | +55 47 3274-6500

- The contact between the substrate and the tape increases over time as the acrylic adhesive requires time to flow and better wet the surface to be glued. Heating the product above 40 °C speeds up the process of adhering.
- Some surfaces may require a primer preparation such as PP and EPDM or a seamer to reduce porosity. Check the primers available in our product line.

Storage:

24 months after the date of manufacture when stored in the original packaging at temperatures up to 35°C and 50% relative humidity.

Rua Manoel Francisco da Costa, nº 4500 - João Pessoa
Jaraguá do Sul – SC - Brasil
89257-407 | www.bold.net | +55 47 3274-6500

Transparent Double-Sided Acrylic Adhesive 9010

Saint-Gobain NORBOND™ 9010 is a Transparent Double Face Acrylic Adhesive with great viscoelasticity and amazing bonding property. After its application it is virtually invisible to the eyes, satisfying design requirements when used in conjunction with transparent glass and/or surfaces. This adhesive was developed for the most diverse industrial applications, whether external or internal, because it has a long durability of adhesive on surfaces of high surface energy.

The 9010 adhesive has been specially developed to provide the following features:

• Great Compliance and Stretching;

• High Weather resistance (UV rays, humidity and high temperature);

• Excellent performance in T-Block and Dynamic Shear;

• Great characteristic of Static Shear;

• Durable uptake even at high temperatures;

• High absorption power of impacts and shocks;

• Invisible application. Available Measures:

• Coils with a width of 800 mm;

• Master roll of 800 mm x 20 or 60 meters;

• Rollers from 5 mm wide;

• Technical parts are available by project.

Special measures made available through commercial evaluation.

Typical applications:

• Furniture Industry;

• Visual Communication;

• Polycarbonates;

• Transparent Signage.

Rua Manoel Francisco da Costa, nº 4500 - João Pessoa
Jaraguá do Sul – SC - Brasil
89257-407 | www.bold.net | +55 47 3274-6500

NORBOND™ 9010 - Properties:

Tests were performed using standard procedures. The values presented are typical reference test values, so they should not be used as a specification. For point data, consult saint-gobain's technical team.

Stickers	Thickness (mm)	90*[1] Stainless steel (kgf/25.4mm)	T-block aluminio[2] (kgf/6.45cm³)	Dynamic shear[3] Stainless steel (Kgf/6.45cm²)	Static stainless steel shear (10000 min.)
9010	0.90mm	5,50	40,00	20,00	100g
Density (g/it)			1020		
Resistance to solvents and detergents			No changes detected		
Temperature resistance			From -40 to 120°C		
UV resistance and weather			Discharge		

[1] Based on ASTM D3330 [2] Based on ASTM D897 [3] Based on ASTM D1002 4 Based on ASTM D3654.

The values presented above are obtained in tests in the company's laboratory, using internal methods and do not serve as a parameter for product release, because they are typical results.

Options (Custom Settings on Minimum Order):

Liner: You can vary the liner type (thickness, color, graphic printing) and release level, but you must evaluate the minimum order.

Important Instructions:

• Saint-Gobain cannot anticipate or control the way the application is carried out, so it is recommended to test the product in conditions similar to the final application.

• Surfaces should be clean and free of oils, grease, moisture, dust or any product that may leave it dirty. Isopropyl alcohol is a great product for surface cleaning.

• Apply a uniform pressure of 1.5 kg per cm² in order to promote good contact between the material to be fixed and the adhesive. The application temperature should be between 20°C and 40°C. It is not recommended to apply the Norbond adhesive™ at temperatures below 15°C, because the adhesive flows less in this condition and can generate a poor contact area.

• The adhesion between the substrate and the adhesive increases over time, typically reaching a final adhesion (100%) after 72h. Heating the surface above 40°C results in an acceleration of the adhering process.

• Some surfaces may require a primer such as PP and EPDM or a seamer to reduce porosity. Check the primers available in our product line. Shelf life: 24 months after the date of manufacture when stored in the original packaging at temperatures up to 35°C and 50% relative humidity.

White Double-Faced Acrylic Adhesive

Saint-Gobain NORBOND™ 2163F is a White Double-Faced Acrylic Adhesive with great viscoelasticity and great bonding property. This adhesive was developed to have superior adhesive in composite aluminum facades (ACM), whether external or internal, because it has excellent compliance to the substrate, great power of adding and high resistance to weather.

The ACM 2163F Adhesive has been specially developed to provide the following features:

• Great Compliance and Stretching;

• High Weather resistance (UV rays, humidity and high temperature);

• Excellent performance in T-Block and Dynamic Shear;

• Great characteristic of Static Shear;

• Durable uptake even at high temperatures;

• High power to absorb impacts and shocks.

Available Measures:

• Coils with width of 800mm;

• Master roll of 800mm x 20 or 60 meters;

• Rollers from 5mm wide;

• Technical parts are available by project.

Special measures made available by commercial evaluation.

Typical Applications:

• Construction and fixation of ACP storefront facades;

• Replacement of Rivets and/or Screws in Hinges.

Rua Manoel Francisco da Costa, nº 4500 - João Pessoa
Jaraguá do Sul – SC - Brasil
89257-407 | www.bold.net | +55 47 3274-6500

NORBOND™ Adhesive ACP 2163F Properties

Tests were performed using standard procedures. The values presented are typical reference test values, but you should not use them as a specification. For point data, consult the Saint-Gobain Technical Team.

Stickers	Density (g/L)	Thickness (mm)	90*[1] Stainless steel (kgf/25.4mm)	T-block aluminio[2] (kgf/6.45cm³)	Dynamic shear[3] Stainless steel (Kgf/6.45cm²)	Static stainless steel shear (10000 min.)
2163F	830	1.60MM	8,00	25,00	20,00	1000g
Density (g/it)				830		
Resistance to solvents and detergents				No changes detected		
Temperature resistance				From -40 to 120°C		
UV resistance and weather				Discharge		

[1] Based on ASTM D3330 [2] Based on ASTM D897 [3] Based on ASTM D1002 4 Based on ASTM D3654.

The values presented above are obtained in tests in the company's laboratory, using internal methods and do not serve as a parameter for product release, because they are typical results.

Options (Custom Settings on Minimum Order):

Liner: You can vary the liner type (thickness, color, graphic printing) and release level, but you must evaluate the minimum order.

Important Instructions:

• Saint-Gobain cannot anticipate or control the way the application is carried out, so it is recommended to test the product in conditions similar to the final application.

• Surfaces should be clean and free of oils, grease, moisture, dust or any product that may leave it dirty. Isopropyl alcohol is a great product for surface cleaning.

• Apply a uniform pressure of 1.5 kg per cm² in order to promote good contact between the material to be fixed and the adhesive tape. The application temperature should be between 20°C and 40°C. It is not recommended to apply norbond tape™ at temperatures below 15°C, because the adhesive flows less in this condition and can generate a poor contact area.

• The adhesion between the substrate and the tape increases over time, typically reaching a final adhesion (100%) after 72h. Heating the surface above 40°C results in an acceleration of the adhering process.

• Some surfaces may require a primer such as PP and EPDM or a seamer to reduce porosity. Check the primers available in our product line.

Validity: 24 months after the date of manufacture, provided stored in the original packaging, at room temperature and 50% relative humidity.