

Evidence of Performance

Test of materials in contact, as per ift-RICHTLINIE DI-02/1,
4.1 test method without influence of ultraviolet light

Test Report

No. 15-003947-PR01
(PB-K02-09-en-01)



Client
Saint-Gobain Performance
Plastics Corby Ltd.
13 Earlstrees Rd.
Earlstrees Industrial Estate
NN17 4AZ Corby
United Kingdom

Basis *)

ift-RICHTLINIE DI-02/1 2009-03

*) Correspond/s to the national standard/s
(e.g. DIN EN)

Product 1
Acrylic core tape, transparent
Designation **NORBOND® A7200**
Material acrylic core tape on pure acrylate

Validity

The data and results refer exclusively to the tested and described specimens.
This test/evaluation does not allow any statement to be made on any other characteristics of the product in terms of performance and quality.

Product 2
Laminated safety glass (LSG)
Designation **SGG STADIP**
Film/thickness **TROSIFOL® BG R20, 0.76 µm**

Result
The acrylic core tape **NORBOND® A7200**, combined with the LSG described above, has fulfilled the requirements of the ift-RICHTLINIE DI-02/1, 4.1 test method without influence of ultraviolet light

Notes on publication

The ift Guidance Sheet "Conditions and Guidance for the Use of ift Test Documents" applies.
The cover sheet can be used as an abstract.

Contents

The report contains a total of 7 page/s.

ift Rosenheim
21.10.2016

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Material Testing

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Material Testing

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4.1 test method without influence of ultraviolet light

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Client: Saint-Gobain Performance Plastics Corby Ltd., NN17 4AZ Corby (United Kingdom)



1 Object

1.1 Description of test specimen

Product 1	Acrylic core tape
Manufacturer	Saint Gobain Performance Plastics, BR-Sumaré/SP
Designation	NORBOND® A7200
Type of adhesive	acrylic core
Thickness	2 mm
Colour	transparent
Cover	blue liner, LDPE, 120 µm
Batch No.	charge A
Production date	15 th January 2016
Product 2	LSG
Manufacturer	Saint Gobain Eckelt Glas GmbH, A-4400, Steyr
Designation	SGG STADIP
Film (designation, manufacturer)	PVB, TROSIFOL® BG R20, Kuraray Europe GmbH, 65795, Hattersheim am Main
Thickness (number)	0.76 mm
Dimension in mm	100 x 150 x 8
Production date	20 th March 2016

The description is based on specifications provided by the client and on inspection of the test specimen at the ift. (Item designations/ numbers as well as material specifications were provided by the client, unless designated as „ift-tested“.)

1.2 Sampling

The following data for sampling have been presented to ift:

Specimens sampled by:	Saint Gobain Glass Europe
Documentation:	A sampling report has been provided to the ift on 30 th September 2016.
Date of delivery:	19 th April 2016
ift-test specimen-No.:	15-003947-PK01 / WE: 40925-001

2 Procedure

2.1 Basis *) and methods

ift-RICHTLINIE DI-02/1: 2009-03

The usability of sealants – Part 2, Test of materials in contact with the edge of laminated glass and laminated safety glass

2.2 Brief description of procedure

The aim of this test is to determine and evaluate the behaviour of material in contact to LG/LSG.

The described method refers to the rebate position, without UV exposure.

Preparation of test specimens

The material to be tested is applied to both an autoclaved edge and a cut edge of the LSG test specimens. The specimens to be prepared are:

Number	Description	Numbering
3	with application, heat exposure	1, 2, 3
1	without application, heat exposure	4
1	with application, standard atmosphere	5
1	without application, standard atmosphere	6

After conditioning at standard atmosphere (23/50 as per DIN EN ISO 291 – class 2) specimen 1, 2, 3 and 4 are stored in an airflow oven at 60 °C for 21 weeks. Test specimen 5 and 6 remain exposed to standard climate.

The test specimen are evaluated in the initial condition, after application of the test material, after 7 and 14 weeks storage in the airflow oven / at standard atmosphere and at completion of the test (after 21 weeks).

Test criteria:

- size/diameter of bubbles (x_1, x_2, \dots, x_n)
- size of biggest bubble (x_{\max})
- sum of the size of the bubbles ($\sum x_1 - x_n$)
- total number of bubbles formed (x_{ges})
- maximum and average penetration depth of bubbles (e_{\max} und e_m)
- discoloration
- delamination

3 Detailed results

Test of materials in contact with edge of laminated glass and laminated safety glass – Method for application in glazing rebate without UV exposure as per ift-RICHTLINIE DI-02, 4.1

Project No.
15-003947-PR01

File No.
15-003947

Client
Saint-Gobain Performance Plastic Corby Ltd.

Basis
ift-RICHTLINIE DI-02/1 The usability of sealants – Part 2, Test of materials in contact with the edge of laminated glass and laminated safety glass

Test equipment used
PstU020776 - Wärmeeofen_UFB400

Test specimen
NORBOND® A7200

Test specimen number
40925

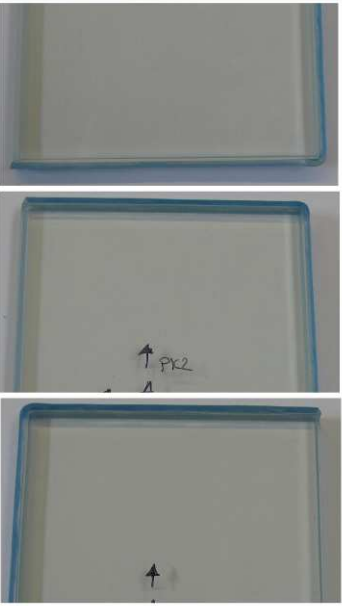



Date of test
25th April 2016

Test engineer in charge
Monika Hutter

Test engineer
Ines Wallaschek

Deviations from test methods
no

visual evaluation before exposure:

		visual evaluation
<p>Test specimens 1, 2 and 3: with application, followed by heat exposure</p>	<p>- no bubbles - no discoloration - no delamination</p>	
<p>Test specimen 4: with application but followed by heat exposure</p>	<p>- no bubbles - no discoloration - no delamination</p>	
<p>Test specimen 5: with application, followed by storage at standard atmosphere</p>	<p>- no bubbles - no discoloration - no delamination</p>	
<p>Test specimen 6: without application but followed by storage at standard atmosphere</p>	<p>- no bubbles - no discoloration - no delamination</p>	

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Basis
ift-RICHTLINIE DI-02/1 The
usability of sealants – Part 2, Test
of materials in contact with the
edge of laminated glass and
laminated safety glass

Test equipment used
Pst/020776 - Wärmeofen_UFB400

Test specimen
NORBOND® A7200

Test specimen number
40925





Date of test
13th June 2016

Test engineer in charge
Monika Hutter

Test engineer
Ines Wallaschek

Deviations from test methods
no

visual evaluation after 7 weeks:

		visual evaluation
Test specimens 1, 2 and 3: with application, followed by heat exposure	- no bubbles - no discoloration - no delamination	
Test specimen 4: with application but followed by heat exposure	- no bubbles - no discoloration - no delamination	
Test specimen 5: with application, followed by storage at standard atmosphere	- no bubbles - no discoloration - no delamination	
Test specimen 6: without application but followed by storage at standard atmosphere	- no bubbles - no discoloration - no delamination	

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visual evaluation after 14 weeks:

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edge of laminated glass and
laminated safety glass

Test equipment used
Pst/020776 - Wärmeofen_UFB400

Test specimen
NORBOND® A7200

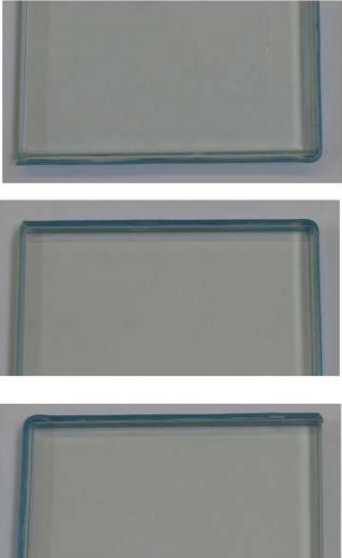



Test specimen number
40925

Date of test
1st August 2016

Test engineer in charge
Monika Hutter

Test engineer
Ines Wallaschek

Deviations from test methods
no

		visual evaluation
<p>Test specimens 1, 2 and 3: with application, followed by heat exposure</p>	<p>- no bubbles - no discoloration - no delamination</p>	
<p>Test specimen 4: with application but followed by heat exposure</p>	<p>- no bubbles - no discoloration - no delamination</p>	
<p>Test specimen 5: with application, followed by storage at standard atmosphere</p>	<p>- no bubbles - no discoloration - no delamination</p>	
<p>Test specimen 6: without application but followed by storage at standard atmosphere</p>	<p>- no bubbles - no discoloration - no delamination</p>	

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Test equipment used
Pst/020776 - Wärmeofen_UFB400

Test specimen
NORBOND® A7200

Test specimen number
40925

Date of test
19th September 2016

Test engineer in charge
Monika Hütter

Test engineer
Ines Wallaschek

Deviations from test methods
no

visual evaluation after 21 weeks:

		visual evaluation
<p>Test specimens 1, 2 and 3: with application, followed by heat exposure</p>	<p>- no bubbles - no discoloration - no delamination</p>	
<p>Test specimen 4: with application but followed by heat exposure</p>	<p>- no bubbles - no discoloration - no delamination</p>	
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