Classification Report
of adhesive strength of wood adhesives according to WATT 91

Test Report 505 31721/2e

Client **Soudal N. V.**
Everdongenlaan 18 - 20

2300 Turnhout
Belgium

Product	Wood adhesive
Product designation	PRO 40 P
Hardener	-
Portion of hardener	-
Special features	-

Adhesive strength according to WATT 91

10.1 N / mm²

Basis

WATT 91 (Wood Adhesives Temperature Test), Determination of length joints tested by tensile test with immersion of temperature according to the Guideline of Fachverband Klebstoffindustrie e.V. Düsseldorf and **ift** Rosenheim

Instructions for use

The present test report serves to demonstrate the adhesive strength of length joints in tensile test with a sample temperature of 80°C.

Validity

The data and results given relate solely to the tested and described wood adhesive

Testing of adhesive strength does not allow any statement to be made on further characteristics of the tested adhesive regarding performance and quality.

Notes on publication

The **ift**-Guidance Sheet "Conditions and Guidance for the Use of **ift** Test Documents" applies.

The cover sheet may be used as abstract.

ift Rosenheim
30 May 2006

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Contents

The report comprises a toal of 4 pages

1 Object
2 Procedure
3 Detailed results

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1 Object

1.1 Description of test specimen

Building material	Wood Adhesive
Manufacturer	Soudal N. V., B-2300 Turhout
Date of production	April 2006
Product designation	PRO 40 P
Number of components	1

To evaluate the performance of the adhesive, test specimens were made to DIN EN 205 with a thin adhesive joint.

Type of wood	Beech, non-damped
Apparent density kg/m^3	700 ± 100
Moisture content in %	12 ± 1
Thickness of the joined parts in mm	5
Amount of adhesive in g/m^2/Art	approx.. 150, applied on one side
Open assembly time in min	approx. 4
Closed assembly time in min	approx. 4
Duration of pressure in h at (20 ± 2) °C	aprpox. 3
Magnitude of pressure in N/mm^2	approx. 0.7

The description is based on the documentation of **ift**. Numbers and names of material are given by the customer.

2 Procedure

2.1 Sampling

The adhesive was chosen by the customer

Delivered	20 April 2006 by the customer
Registry No.	19911/01

To evaluate the performance of the adhesive, test specimens were produced at **ift** according to DIN EN 205 : 1997-07 with a thin adhesive joint.

Number of test specimens 20 samples

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2.2 Process

Technical basics	WATT 91 (Wood Adhesives Temperature Test), determination of adhesive strength of length joints tested by tensile test with immersion of temperature according to the Guideline of Fachverband Klebstoffindustrie e.V. Düsseldorf and **ift** Rosenheim
Boundary conditions	Correspond to the demands of the standard
Load speed	50 mm/min
Deviation	There are no deviations from the test procedure or test conditions

2.3 Test equipment

Press:	Equipment number: 21447
Material testing machine:	corresponds to DIN EN ISO 7500-1 : 1999-11 Equipment number: 22561
Oven with circulating air:	Equipment number: 22159
Normal climate room:	Equipment number: 22040
Measuring device for cut width:	Equipment number: 22900

2.4 Testing

Date/Period	May 2006
Testing personnel	Thomas Eder

3 Detailed results

Table 1 Measured values and statistical evaluation to determine the adhesive strength at 80 °C for the adhesive PRO 40 P

Test no. Measuring data	N/mm^2
1	11.39
2	5.31
3	8.91
4	11.16
5	12.30
6	11.96
7	11.33
8	10.06
9	8.40
10	9.26
11	12.30
12	9.83
13	9.61
14	8.67
15	9.70
16	12.11
17	11.03
18	10.80
19	9.58
20	8.79
Number	20
Mean value	10.1
Standard deviation	1.7
Variation coefficient in %	16.9
Maximum	12.3
Minimum	5.3
Estimated wood rupture in %	0-100

ift Rosenheim
30 May 2006

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