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TEST REPORT N°2014B VEC 22379-1a

Including 14 pages + 2 annexes
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Mons, September 8th, 2014

REQUESTED BY : **AGC Glass Europe - Technovation Centre**

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REFERENCE OF THE REQUEST : Order n°450560867

CONCERNED MANUFACTURER : **AGC Glass Europe SA**
4 avenue Jean Monnet
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BELGIUM

NUMBER OF SAMPLES AND IDENTIFICATION : **Lacobel T – SG500**

PURPOSE OF THE REQUESTED : Tests according to EOTA – ETAG 002
Mechanical Performances *

SAMPLES RECEIVED ON : 20/01/2014 and 14/07/2014

TESTING DATE : From 30/01/2014

REMARKS : * Test under BELAC accreditation



Notified body (Id.N°1174)
according to Regulation (EU) No 305/2011 - Construction products

TECHNICAL REPORT
ADHESION PERFORMANCES ACCORDING TO ETAG 002
GUIDELINE

SAMPLES

Samples were prepared by Sika on 12/12/2013 (see annex 1) and 30/06/2014 (see annex 2)

Lacobel T Cool White+ Sikasil SG-500+ Lacobel T Crisp White

Batch A/B : MI-10109135/MI-02505132
Number of samples prepared : 90

Batch A/B : MI-09904145/MI-02505132
Number of samples prepared : 20

RESULTS

The tests were conducted in compliance with the methods described in the "Guideline for European Technical Approval for Structural Sealant Glazing System (SSGS)" ETAG n° 002.

Définitions :

K_x = Stiffness of the sample at x% elongation in the initial state

$K_{x,c}$ = Stiffness of the sample at x% elongation after conditioning
 $= 100 \cdot \sigma_x / x$

$R_{u,5}$ = the characteristic breaking stress giving 75% confidence that 95% of the test result will be higher than this value
 $= X_{mean} - \tau_{\alpha\beta} \cdot S$

S = standard deviation of the serie under consideration

$X_{mean,n}$ = the average breaking stress, either under tension or shear in the initial state

$X_{mean,c}$ = the average breaking stress, either under tension or shear after conditioning

$\Delta X_{mean} = X_{mean,c} / X_{mean,n}$

Mechanical performances

5.1.4.1. INITIAL TESTS – INITIAL MECHANICAL STRENGTH

5.1.4.1.1. TENSION – RUPTURE*

a) Results for 10 samples conditioned at +23°C

Sample number	Section (mm ²)	Limited to 5% stretch. (N/mm ²)	Limited to 10 % stretch. (N/mm ²)	Limited to 15% stretch. (N/mm ²)	Limited to 20% stretch. (N/mm ²)	Limited to 25% stretch. (N/mm ²)	Limit of breakage (N/mm ²)	Stretch on breaking (%)	Type of breakage (*)
1	591	0.12	0.24	0.34	0.43	0.51	1.05	70	100C
2	582	0.11	0.22	0.32	0.41	0.49	0.98	65	100C
3	586	0.12	0.26	0.37	0.46	0.54	1.12	75	100C
4	588	0.13	0.26	0.37	0.45	0.53	1.10	74	100C
5	597	0.10	0.22	0.33	0.42	0.50	1.11	74	100C
6	595	0.11	0.24	0.34	0.43	0.50	1.31	102	100C
7	591	0.11	0.24	0.34	0.44	0.51	1.25	91	100C
8	585	0.11	0.22	0.33	0.41	0.49	1.27	95	100C
9	579	0.10	0.22	0.33	0.41	0.49	1.00	67	100C
10	590	0.11	0.22	0.33	0.42	0.49	0.98	67	100C
Average	588	0.11	0.23	0.34	0.43	0.51	1.12	78	
Standard deviation	6	0.01	0.02	0.02	0.02	0.02	0.12	13	
Minimum	579	0.10	0.22	0.32	0.41	0.49	0.98	65	
Maximum	597	0.13	0.26	0.37	0.46	0.54	1.31	102	

(*) xC: x% cohesive

K_{12,5} = 2.30

Ru,5 = 0.87

b) Results for 5 samples conditioned at -20°C

Sample number	Section (mm ²)	Limited to 5% stretch. (N/mm ²)	Limited to 10 % stretch. (N/mm ²)	Limited to 15% stretch. (N/mm ²)	Limited to 20% stretch. (N/mm ²)	Limited to 25% stretch. (N/mm ²)	Limit of breakage (N/mm ²)	Stretch on breaking (%)	Type of breakage (*)
1	568	0.14	0.28	0.39	0.48	0.56	1.56	117	100C
2	582	0.11	0.24	0.35	0.44	0.51	1.23	85	100C
3	594	0.10	0.21	0.31	0.39	0.47	1.26	97	100C
4	578	0.12	0.25	0.36	0.44	0.52	1.68	129	100C
5	575	0.11	0.24	0.36	0.45	0.53	1.48	106	100C
Average	579	0.12	0.24	0.35	0.44	0.52	1.44	107	
Standard deviation	10	0.02	0.03	0.03	0.03	0.03	0.19	17	
Minimum	568	0.10	0.21	0.31	0.39	0.47	1.23	85	
Maximum	594	0.14	0.28	0.39	0.48	0.56	1.68	129	

(*) xC: x% cohesive

$$R_{u,5} = 0.97$$

$$\Delta X_{\text{mean}} = 1.29$$

c) Results for 5 samples conditioned at +80°C

Sample number	Section (mm ²)	Limited to 5% stretch. (N/mm ²)	Limited to 10 % stretch. (N/mm ²)	Limited to 15% stretch. (N/mm ²)	Limited to 20% stretch. (N/mm ²)	Limited to 25% stretch. (N/mm ²)	Limit of breakage (N/mm ²)	Stretch on breaking (%)	Type of breakage (*)
1	593	0.08	0.20	0.31	0.40	0.48	0.90	56	100C
2	577	0.08	0.18	0.29	0.39	0.47	0.80	49	100C
3	584	0.07	0.18	0.28	0.37	0.45	1.00	65	100C
4	573	0.09	0.21	0.31	0.40	0.49	0.93	57	100C
5	575	0.05	0.16	0.28	0.38	0.47	1.03	65	100C
Average	581	0.07	0.19	0.29	0.39	0.47	0.93	58	
Standard deviation	8	0.02	0.02	0.02	0.01	0.01	0.09	7	
Minimum	573	0.05	0.16	0.28	0.37	0.45	0.80	49	
Maximum	593	0.09	0.21	0.31	0.40	0.49	1.03	65	

(*) xC: x% cohesive

$$R_{u,5} = 0.71$$

$$\Delta X_{\text{mean}} = 0.83$$

5.1.4.1.2. SHEAR – RUPTURE*

a) Results for 10 samples conditioned at +23°C

Sample number	Section (mm ²)	Limited to 5% stretch. (N/mm ²)	Limited to 10 % stretch. (N/mm ²)	Limited to 15% stretch. (N/mm ²)	Limited to 20% stretch. (N/mm ²)	Limited to 25% stretch. (N/mm ²)	Limit of breakage (N/mm ²)	Stretch on breaking (%)	Type of breakage (*)
1	582	0.03	0.07	0.10	0.13	0.16	0.82	133	100C
2	622	0.04	0.07	0.10	0.13	0.16	0.78	131	100C
3	611	0.04	0.07	0.10	0.13	0.15	1.04	166	100C
4	596	0.03	0.06	0.09	0.13	0.16	0.81	126	100C
5	573	0.03	0.06	0.09	0.12	0.15	1.08	164	100C
6	602	0.03	0.06	0.09	0.12	0.15	0.80	137	100C
7	613	0.03	0.06	0.09	0.12	0.14	0.81	133	100C
8	600	0.04	0.07	0.10	0.13	0.16	0.89	140	100C
9	600	0.03	0.06	0.10	0.13	0.16	0.82	148	100C
10	589	0.03	0.05	0.08	0.11	0.14	0.85	139	100C
Average	599	0.03	0.06	0.09	0.13	0.15	0.87	142	
Standard deviation	15	0.00	0.01	0.01	0.01	0.01	0.10	14	
Minimum	573	0.03	0.05	0.08	0.11	0.14	0.78	126	
Maximum	622	0.04	0.07	0.10	0.13	0.16	1.08	166	

(*) xC: x% cohesive

Ru,5 = 0.66

b) Results for 5 samples conditioned at -20°C

Sample number	Section (mm ²)	Limited to 5% stretch. (N/mm ²)	Limited to 10 % stretch. (N/mm ²)	Limited to 15% stretch. (N/mm ²)	Limited to 20% stretch. (N/mm ²)	Limited to 25% stretch. (N/mm ²)	Limit of breakage (N/mm ²)	Stretch on breaking (%)	Type of breakage (*)
1	594	0.03	0.05	0.08	0.11	0.14	1.00	167	100C
2	580	0.05	0.08	0.11	0.14	0.17	1.04	182	100C
3	607	0.04	0.07	0.10	0.13	0.16	1.20	165	100C
4	577	0.04	0.08	0.11	0.14	0.17	1.10	155	100C
5	595	0.05	0.08	0.11	0.14	0.17	1.42	194	100C
Average	590	0.04	0.07	0.10	0.13	0.16	1.15	173	
Standard deviation	12	0.01	0.01	0.01	0.01	0.01	0.17	16	
Minimum	577	0.03	0.05	0.08	0.11	0.14	1.00	155	
Maximum	607	0.05	0.08	0.11	0.14	0.17	1.42	194	

(*) xC: x% cohesive

$$R_{u,5} = 0.73$$

$$\Delta X_{\text{mean}} = 1.32$$

c) Results for 5 samples conditioned at +80°C

Sample number	Section (mm ²)	Limited to 5% stretch. (N/mm ²)	Limited to 10 % stretch. (N/mm ²)	Limited to 15% stretch. (N/mm ²)	Limited to 20% stretch. (N/mm ²)	Limited to 25% stretch. (N/mm ²)	Limit of breakage (N/mm ²)	Stretch on breaking (%)	Type of breakage (*)
1	592	0.03	0.07	0.10	0.13	0.16	0.58	113	100C
2	600	0.04	0.06	0.09	0.12	0.15	0.71	115	100C
3	592	0.02	0.04	0.07	0.09	0.12	0.64	117	100C
4	580	0.03	0.06	0.09	0.13	0.16	0.83	129	100C
5	578	0.03	0.07	0.10	0.13	0.16	0.61	102	100C
Average	588	0.03	0.06	0.09	0.12	0.15	0.67	115	
Standard deviation	9	0.01	0.01	0.01	0.02	0.02	0.10	10	
Minimum	578	0.02	0.04	0.07	0.09	0.12	0.58	102	
Maximum	600	0.04	0.07	0.10	0.13	0.16	0.83	129	

(*) xC: x% cohesive

$$R_{u,5} = 0.42$$

$$\Delta X_{\text{mean}} = 0.77$$

5.1.4.2. RESIDUAL MECHANICAL STRENGTH AFTER ARTIFICIAL AGEING

5.1.4.2.1 IMMERSION IN WATER AT HIGH TEMPERATURE WITH SOLAR RADIATION*

a) *Conditioning :*

- Duration : 2 x 21 days
- Water temperature : 45°C ± 0.1°C
- Conductivity of the water : 8 µs

b) *Results of the traction test after the artificial ageing :*

Lacobel T Cool White

After 21 days :

Sample number	Section (mm ²)	Limited to 5% stretch. (N/mm ²)	Limited to 10 % stretch. (N/mm ²)	Limited to 15% stretch. (N/mm ²)	Limited to 20% stretch. (N/mm ²)	Limited to 25% stretch. (N/mm ²)	Limit of breakage (N/mm ²)	Stretch on breaking (%)	Type of breakage (*)
1	575	0.09	0.18	0.25	0.31	0.36	0.84	90	100C
2	590	0.09	0.17	0.23	0.29	0.34	1.18	151	100C
3	581	0.08	0.18	0.25	0.30	0.35	0.92	105	100C
4	583	0.07	0.16	0.23	0.29	0.34	1.10	139	100C
5	580	0.07	0.16	0.23	0.28	0.33	0.90	111	100C
Average	582	0.08	0.17	0.24	0.29	0.34	0.99	119	
Standard deviation	6	0.01	0.01	0.01	0.01	0.01	0.14	25	
Minimum	575	0.07	0.16	0.23	0.28	0.33	0.84	90	
Maximum	590	0.09	0.18	0.25	0.31	0.36	1.18	151	

(*) xC: x% cohesive

$$\Delta X_{\text{mean}} = 0.88$$

After 42 days :

Sample number	Section (mm ²)	Limited to 5% stretch. (N/mm ²)	Limited to 10 % stretch. (N/mm ²)	Limited to 15% stretch. (N/mm ²)	Limited to 20% stretch. (N/mm ²)	Limited to 25% stretch. (N/mm ²)	Limit of breakage (N/mm ²)	Stretch on breaking (%)	Type of breakage (*)
1	583	0.05	0.12	0.18	0.25	0.30	1.04	148	100C
2	602	0.05	0.11	0.19	0.24	0.29	0.95	136	100C
3	590	0.07	0.14	0.22	0.27	0.32	1.04	158	100C
4	590	0.05	0.13	0.20	0.26	0.31	0.86	118	10ACW
5	573	0.05	0.12	0.19	0.25	0.30	1.01	168	100C
Average	588	0.05	0.12	0.20	0.25	0.30	0.98	145	
Standard deviation	11	0.01	0.01	0.02	0.01	0.01	0.08	19	
Minimum	573	0.05	0.11	0.18	0.24	0.29	0.86	118	
Maximum	602	0.07	0.14	0.22	0.27	0.32	1.04	168	

(*) xC: x% cohesive

yACW : y% adhesive cool white

$$\Delta X_{\text{mean}} = 0.88$$

Lacobel T Crisp White

After 21 days :

Sample number	Section (mm ²)	Limited to 5% stretch. (N/mm ²)	Limited to 10 % stretch. (N/mm ²)	Limited to 15% stretch. (N/mm ²)	Limited to 20% stretch. (N/mm ²)	Limited to 25% stretch. (N/mm ²)	Limit of breakage (N/mm ²)	Stretch on breaking (%)	Type of breakage (*)
1	582	0.10	0.19	0.26	0.31	0.36	1.07	135	100C
2	573	0.10	0.18	0.24	0.30	0.34	0.94	115	100C
3	574	0.08	0.17	0.24	0.30	0.35	1.13	141	100C
4	556	0.07	0.16	0.23	0.28	0.34	1.14	141	100C
5	582	0.08	0.16	0.23	0.28	0.33	0.92	119	100C
Average	573	0.09	0.17	0.24	0.29	0.34	1.04	130	
Standard deviation	11	0.01	0.01	0.01	0.01	0.01	0.10	12	
Minimum	556	0.07	0.16	0.23	0.28	0.33	0.92	115	
Maximum	582	0.10	0.19	0.26	0.31	0.36	1.14	141	

(*) xC: x% cohesive

$$\Delta X_{\text{mean}} = 0.93$$

After 42 days :

Sample number	Section (mm ²)	Limited to 5% stretch. (N/mm ²)	Limited to 10 % stretch. (N/mm ²)	Limited to 15% stretch. (N/mm ²)	Limited to 20% stretch. (N/mm ²)	Limited to 25% stretch. (N/mm ²)	Limit of breakage (N/mm ²)	Stretch on breaking (%)	Type of breakage (*)
1	575	0.05	0.12	0.19	0.25	0.30	0.94	124	100C
2	576	0.07	0.15	0.22	0.28	0.33	0.91	119	100C
3	589	0.06	0.12	0.19	0.25	0.30	0.99	136	100C
4	596	0.06	0.12	0.20	0.25	0.30	0.92	142	100C
5	582	0.06	0.15	0.21	0.27	0.31	0.99	145	100C
Average	583	0.06	0.13	0.20	0.26	0.31	0.95	133	
Standard deviation	9	0.01	0.02	0.01	0.01	0.01	0.04	11	
Minimum	575	0.05	0.12	0.19	0.25	0.30	0.91	119	
Maximum	596	0.07	0.15	0.22	0.28	0.33	0.99	145	

(*) xC: x% cohesive

$$\Delta X_{\text{mean}} = 0.85$$

5.1.4.2.2 HUMIDITY AND NaCl ATMOSPHERE*

a) Conditioning :

- Duration : 480 hours
- NaCl concentration : 48.4 g/l
- pH : 6.6

b) Results of the traction test after the artificial ageing :

Sample number	Section (mm ²)	Limited to 5% stretch. (N/mm ²)	Limited to 10 % stretch. (N/mm ²)	Limited to 15% stretch. (N/mm ²)	Limited to 20% stretch. (N/mm ²)	Limited to 25% stretch. (N/mm ²)	Limit of breakage (N/mm ²)	Stretch on breaking (%)	Type of breakage (*)
1	582	0.12	0.22	0.30	0.37	0.43	1.14	102	100C
2	576	0.12	0.23	0.31	0.38	0.44	1.08	91	100C
3	570	0.13	0.24	0.32	0.39	0.45	1.30	125	100C
4	582	0.14	0.25	0.33	0.39	0.45	1.19	112	100C
5	570	0.14	0.24	0.32	0.39	0.45	1.22	115	100C
6	582	0.14	0.25	0.33	0.40	0.46	1.14	103	100C
7	585	0.11	0.20	0.29	0.36	0.42	0.94	81	5ACW
8	585	0.09	0.19	0.27	0.35	0.41	1.09	94	100C
9	590	0.13	0.23	0.31	0.38	0.43	1.13	106	100C
10	574	0.10	0.20	0.28	0.36	0.43	1.07	89	100C
Average	580	0.12	0.23	0.31	0.38	0.44	1.13	102	
Standard deviation	7	0.02	0.02	0.02	0.02	0.02	0.10	13	
Minimum	570	0.09	0.19	0.27	0.35	0.41	0.94	81	
Maximum	590	0.14	0.25	0.33	0.40	0.46	1.30	125	

(*) xC: x% cohesive

yACW : y% adhesive cool white

$$\Delta X_{\text{mean}} = 1.01$$

5.1.4.2.3 HUMIDITY AND SO₂ ATMOSPHERE*

a) *Conditioning :*

- Duration : 20 cycles
- 0.2l SO₂

b) *Results of the traction test after the artificial ageing :*

Sample number	Section (mm ²)	Limited to 5% stretch. (N/mm ²)	Limited to 10 % stretch. (N/mm ²)	Limited to 15% stretch. (N/mm ²)	Limited to 20% stretch. (N/mm ²)	Limited to 25% stretch. (N/mm ²)	Limit of breakage (N/mm ²)	Stretch on breaking (%)	Type of breakage (*)
1	573	0.10	0.20	0.28	0.35	0.41	1.11	106	100C
2	589	0.11	0.21	0.29	0.36	0.42	1.03	92	100C
3	585	0.09	0.18	0.26	0.33	0.40	1.24	126	100C
4	571	0.11	0.20	0.28	0.35	0.41	0.94	81	100C
5	575	0.09	0.17	0.25	0.31	0.37	0.94	90	100C
6	582	0.07	0.16	0.24	0.31	0.37	0.97	96	100C
7	582	0.08	0.18	0.27	0.34	0.40	1.10	118	100C
8	Glass broken								100C
9	587	0.10	0.21	0.29	0.36	0.42	1.04	100	100C
10	595	0.07	0.14	0.22	0.28	0.34	0.97	105	100C
Average	582	0.09	0.18	0.26	0.33	0.39	1.04	102	
Standard deviation	8	0.02	0.02	0.02	0.03	0.03	0.10	14	
Minimum	571	0.07	0.14	0.22	0.28	0.34	0.94	81	
Maximum	595	0.11	0.21	0.29	0.36	0.42	1.24	126	

(*) xC: x% cohesive

$$\Delta X_{\text{mean}} = 0.93$$

5.1.4.2.4 Facade cleaning product*

a) Results for 10 samples conditioned at +23°C

Sample number	Section (mm ²)	Limited to 5% stretch. (N/mm ²)	Limited to 10 % stretch. (N/mm ²)	Limited to 15% stretch. (N/mm ²)	Limited to 20% stretch. (N/mm ²)	Limited to 25% stretch. (N/mm ²)	Limit of breakage (N/mm ²)	Stretch on breaking (%)	Type of breakage (*)
1	607	0.08	0.19	0.29	0.38	0.45	1.12	90	100C
2	615	0.08	0.19	0.31	0.41	0.49	1.27	102	100C
3	611	0.09	0.20	0.31	0.40	0.48	1.05	77	100C
4	594	0.13	0.26	0.37	0.47	0.55	1.22	84	100C
5	596	0.09	0.19	0.30	0.39	0.47	0.98	70	100C
6	612	0.09	0.19	0.29	0.38	0.45	1.18	95	100C
7	618	0.09	0.22	0.33	0.42	0.50	1.00	77	100C
8	587	0.11	0.22	0.33	0.42	0.50	1.28	106	100C
9	590	0.08	0.17	0.26	0.35	0.43	1.07	82	100C
10	629	0.09	0.19	0.29	0.38	0.46	1.16	95	100C
Average	606	0.09	0.20	0.31	0.40	0.48	1.13	88	
Standard deviation	14	0.02	0.03	0.03	0.03	0.03	0.11	12	
Minimum	587	0.08	0.17	0.26	0.35	0.43	0.98	70	
Maximum	629	0.13	0.26	0.37	0.47	0.55	1.28	106	

(*) xC: x% cohesive

b) Conditioning :

- Duration : 21 days
- Temperature : 46.2 °C ± 0.5 °C
- Cleaning product : Palmolive (1% on water)

c) Results of the traction test after the artificial ageing :

Sample number	Section (mm ²)	Limited to 5% stretch. (N/mm ²)	Limited to 10 % stretch. (N/mm ²)	Limited to 15% stretch. (N/mm ²)	Limited to 20% stretch. (N/mm ²)	Limited to 25% stretch. (N/mm ²)	Limit of breakage (N/mm ²)	Stretch on breaking (%)	Type of breakage (*)
1	552	0.11	0.21	0.29	0.35	0.40	1.10	151	100C
2	588	0.12	0.22	0.29	0.35	0.40	1.08	149	100C
3	588	0.09	0.19	0.26	0.33	0.38	1.06	144	100C
4	586	0.10	0.20	0.28	0.34	0.39	1.05	175	100C
5	595	0.08	0.19	0.26	0.32	0.38	0.94	143	100C
6	626	0.11	0.22	0.29	0.35	0.40	0.90	145	100C
7	583	0.10	0.21	0.29	0.35	0.40	1.06	149	100C
8	596	0.10	0.20	0.27	0.33	0.39	1.00	137	100C
9	586	0.12	0.22	0.29	0.35	0.40	0.98	159	100C
10	599	0.11	0.21	0.29	0.35	0.40	1.12	165	100C
Average	590	0.10	0.21	0.28	0.34	0.39	1.03	152	
Standard deviation	18	0.01	0.01	0.01	0.01	0.01	0.07	12	
Minimum	552	0.08	0.19	0.26	0.32	0.38	0.90	137	
Maximum	626	0.12	0.22	0.29	0.35	0.40	1.12	175	

(*) xC: x% cohesive

$$\Delta X_{\text{mean}} = 0.91$$

SUMMARY

ETAG GUIDELINE TEST NUMBER	TEST	TEST CONDI- TIONS	CRITERIA				
			X _{mean} Mpa	ΔX_{mean} ≥ 0.75	$K_{12.5}$ For $0 \leq x\% \leq 12.5$ $0.5 \leq K_{x,c}/K_x \leq 1.10$	R _{u,5}	TYPE OF BREAKAGE ($\geq 90\% C$)
5.1.4.1.1	Tension	+23°C	1.12	-	$\sigma_{12.5} = 0.29$ $K_{12.5} = 2.30$	1.15	100C
		-20°C	1.44	1.29		1.19	100C
		+80°C	0.93	0.83		1.00	100C
5.1.4.1.2	Shear	+23°C	0.87	-		0.78	100C
		-20°C	1.15	1.32		0.99	100C
		+80°C	0.67	0.77		0.63	100C
5.1.4.2.1	H ₂ O at 45°C + UV Lacobel T Cool White	500 h	0.99	0.88			100C
		1000 h	0.98	0.88	$\sigma_{12.5,c} = 0.16$ $K_{12.5,c} = 1.28$ $K_{12.5,c}/K_{12.5} = 0.56$		98C
5.1.4.2.1	H ₂ O at 45°C + UV Lacobel T Crisp White	500 h	1.04	0.93			100C
		1000 h	0.95	0.85	$\sigma_{12.5,c} = 0.17$ $K_{12.5,c} = 1.34$ $K_{12.5,c}/K_{12.5} = 0.58$		100C
5.1.4.2.2	H ₂ O + NaCl	480h	1.13	1.01			100C
5.1.4.2.3	H ₂ O + SO ₂	20 cycles	1.04	0.93			100C
5.1.4.2.4	Cleaning product	Tension at 23 °C	1.13	-	-		100C
		Cleaning product 21 days	1.03	0.91	-		100C

x_C = x% cohesive

D. LIBERT
Head of Department

Glazing and Components – INISMa

Annex 1

Preparation of samples 12/12/2013

Annex 2

Preparation of samples 30/06/2014