



Prüfbericht - Nr.: 13014691 001			Seite 1 von 7		
Test Report No.:			Page 1 of 7		
Auftraggeber: LION CHEMTECH CO., LTD.					
Client: 41-5, Moonpyong-dong, Daeduk-ku, Daejeon, 306-220, Rep. of Korea.					
Gegenstand der Prüfung: Acryl Solid Surface					
Test item:					
Bezeichnung: A-104 (Pure White)		Serien-Nr.: n.a. (prototype)			
Identification:		Serial No.:			
Wareneingangs-Nr.: 133035418		Eingangsdatum: 20.11.2013			
Receipt No.:		Date of receipt:			
Zustand des Prüfgegenstandes bei Anlieferung: Appearance is good.					
Condition of test item at delivery:					
Prüfört: CENTRUM STAVEBNIHO INZENYRSTVI a. s. (Notified Body No. 1390)					
Testing location:					
Prüfgrundlage: EN 13501-1+A1 : 2010					
Test specification:					
Prüfergebnis: Der Prüfgegenstand entspricht oben genannter Prüfgrundlage(n).					
Test Result:			The test item passed the test specification(s).		
Prüflaboratorium: TÜV Rheinland Korea Ltd.					
Testing Laboratory:			E&C Venture Dream Tower 6		
			197-28, Guro-dong, Guro-gu, Seoul, 152-719, Republic of Korea		
geprüft/ tested by:			kontrolliert/ reviewed by:		
					
27.01.2014		S.Y. Lee / PE	28.01.2014		S.H. Yang / Manager
Datum	Name/Stellung	Unterschrift	Datum	Name/Stellung	Unterschrift
Date	Name/Position	Signature	Date	Name/Position	Signature
Sonstiges/ Other Aspects: Report has been prepared based on the CSI report nr. PK-14-005, 16999-1,2,3					
Abkürzungen: P(ass) = entspricht Prüfgrundlage F(ail) = entspricht nicht Prüfgrundlage N/A = nicht anwendbar N/T = nicht getestet			Abbreviations: P(ass) = passed F(ail) = failed N/A = not applicable N/T = not tested		
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.					
<i>This test report relates to the a. m. test item. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.</i>					

Test method : EN ISO 11925-2

Appearance : White tiles 300mm x 300mm of thickness 12.3mm and density 1,750 kg/m³

The flame application time : 35s

Conditioning of the test specimens: according to the EN 13238, clause 4.2,

Measured values and the test results

Surface flame attack	Lengthwise orientation			Across orientation		
	1	2	3	1	2	3
Sample No. :						
Ignition of the sample :	no	no	no	no	no	no
Reaching the mark (s) :	(-)	(-)	(-)	(-)	(-)	(-)
Ignition of the filter paper :	no	no	no	no	no	no

(-) : flame tip did not reach the mark

Observation during the test : The test specimens did not ignite by the effect of the ignition source.

Conclusion : The test results relates to the behaviour of the test specimen of a product under the particular conditions of the test; they are not intended to be the sole criterion for assessing the potential fire hazard of the product of use. The results of tests are concerned only with the subject of testing.



Test method : EN 13823

Appearance : White tiles 300mm x 300mm of thickness 12.3mm and density 1,750 kg/m³

The tiles were mechanically fixed with steel screw on the standard substrate according to EN 13238 – paper faced gypsum plasterboard of thickness 12.5mm

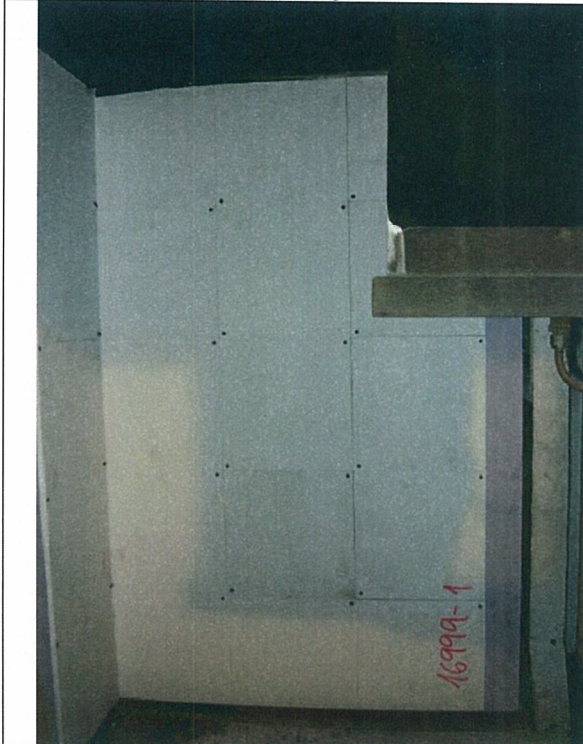
Conditioning: according to the EN 13238

MEASURED VALUES AND TEST RESULTS					
Test specimen no.	1	2	3	Ø	Expanded uncertainty
Date of test	01-13	01-13	01-13		
LFS > edge	no	no	no	no	(-)
FIGRA _{0,2 MJ} [W/s]	36,5	38,7	35,9	37,0	6,3
FIGRA _{0,4 MJ} [W/s]	36,5	38,7	35,9	37,0	6,3
THR _{600 s} [MJ]	5,5	5,6	5,5	5,5	0,1
SMOGRA [m ² /s ²]	0	0	0	0,0	(-)
TSP _{600 s} [m ²]	6,2	7,5	6,4	6,7	0,8
Flaming droplets/particles	no	no	no	no	(-)
Time of flaming [s]	0	0	0	0,0	(-)
Behaviour during the tests: The flame spreads vertically along to surface.					

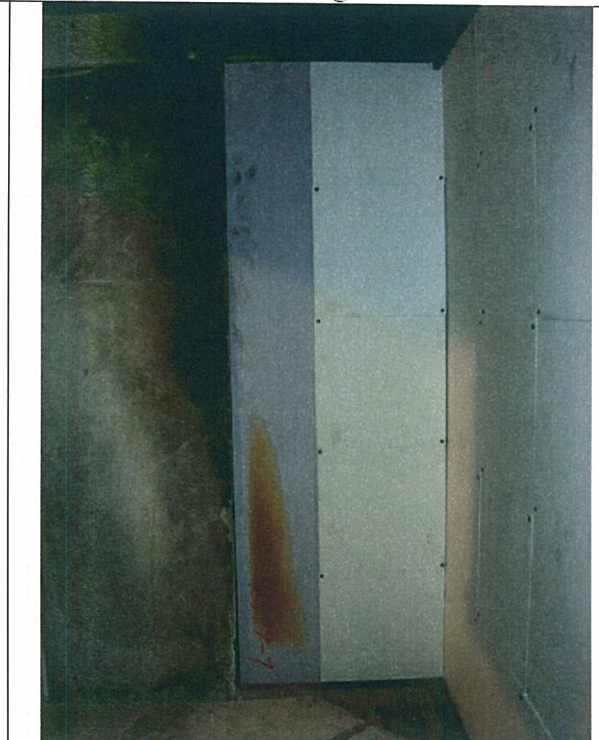
Conclusion : The mentioned expanded uncertainty is obtained by multiplying the standard uncertainty by a coverage factor k=2, which corresponded to a level of confidence of 95%.

The test results related to the behaviour of the test specimen of a product under the particular conditions of the test; they are not intended to be the sole criterion for assessing the potential fire hazard of the product of use. The results of tests are concerned only with the subject of testing.

The photograph of the exposed surface of long wing



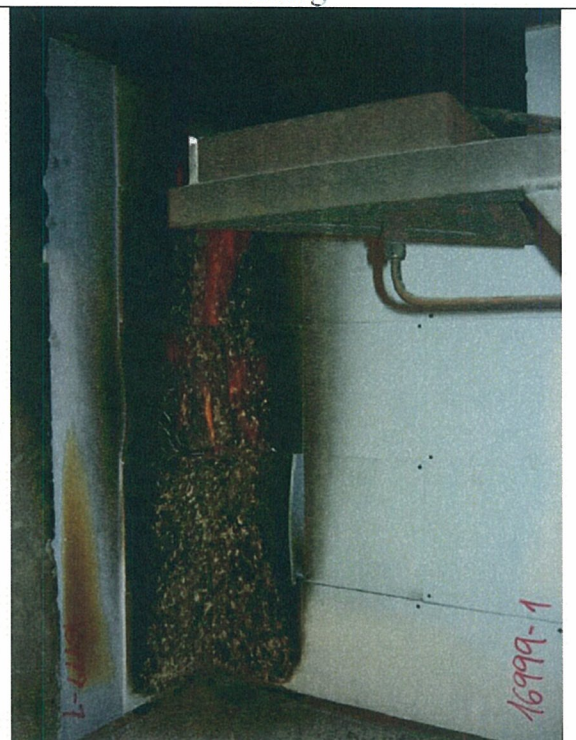
The photograph of the exposed surface of short wing

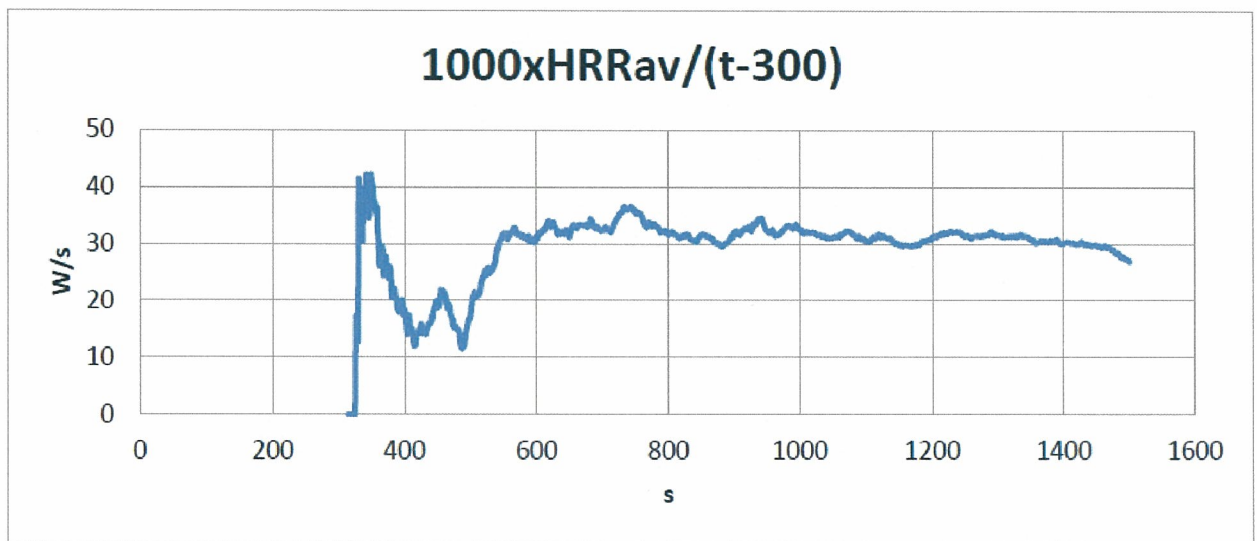
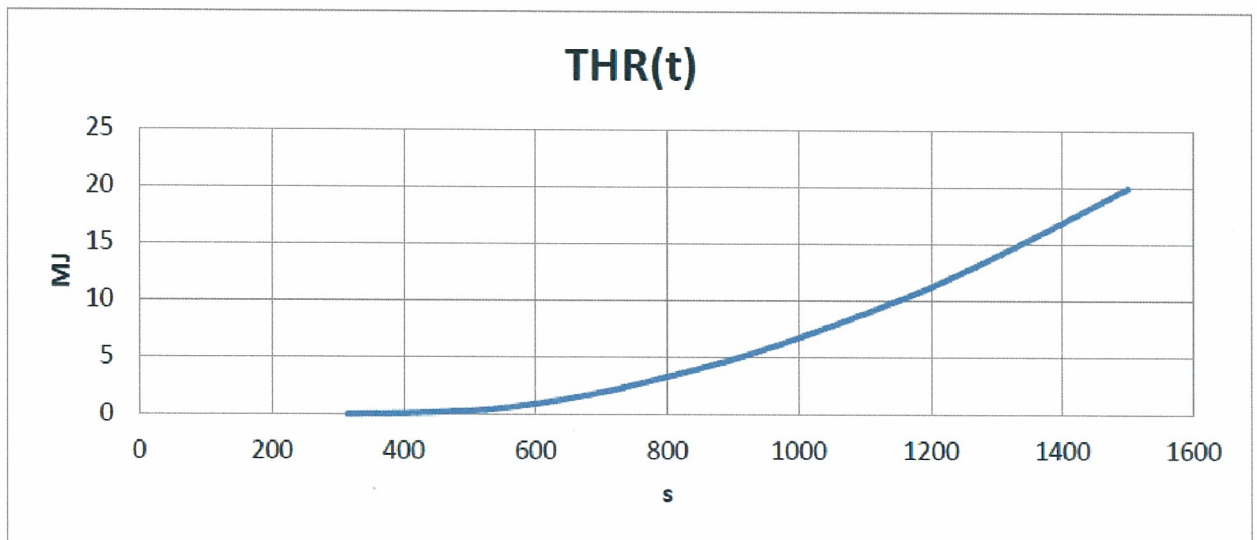
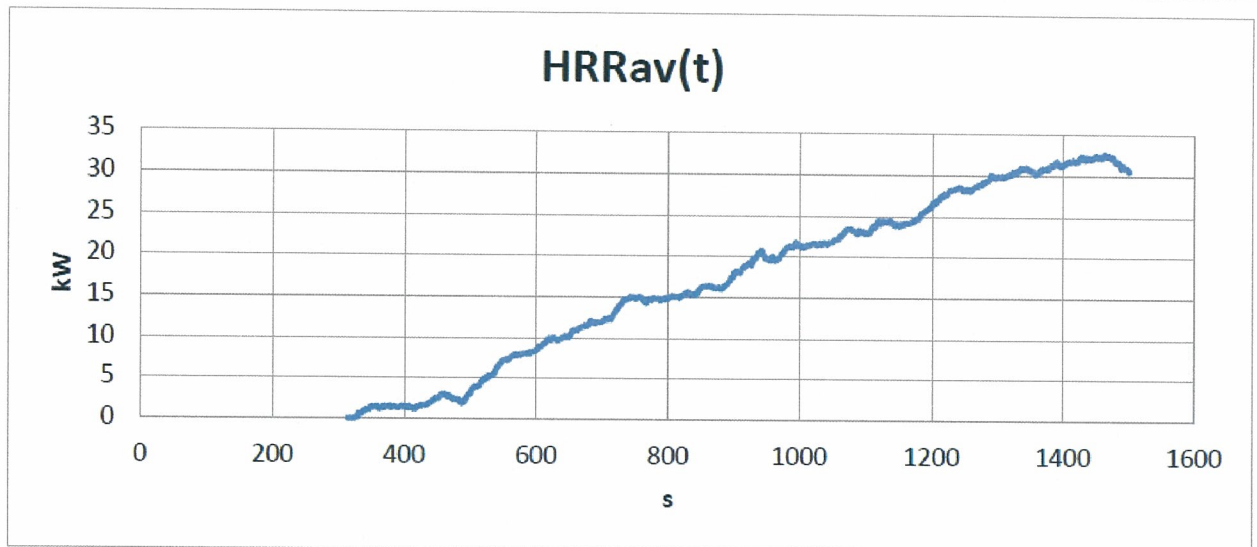


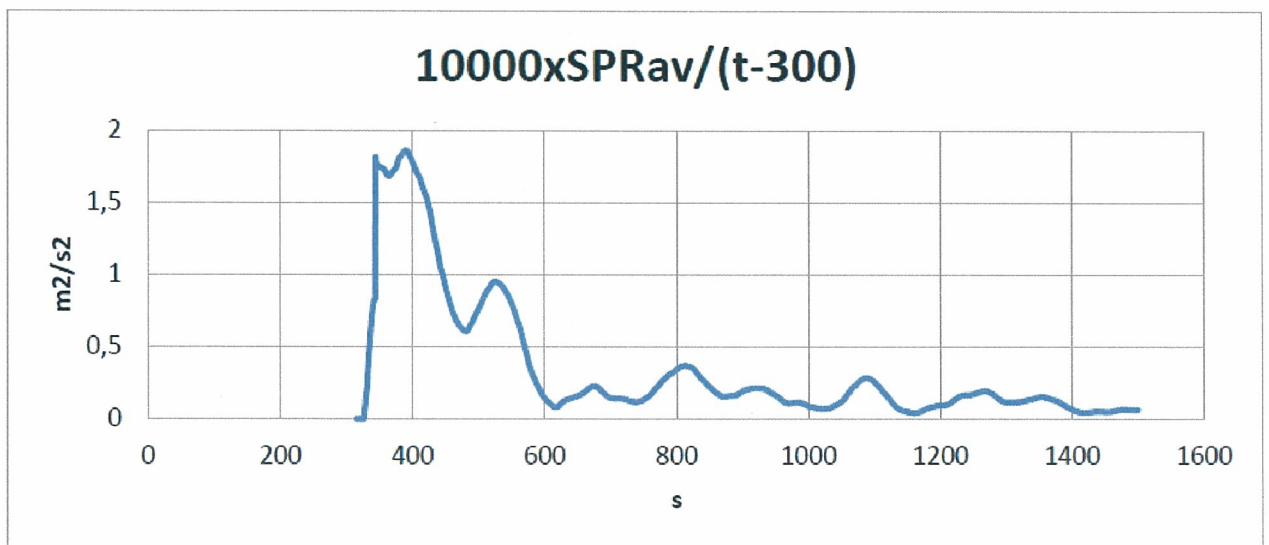
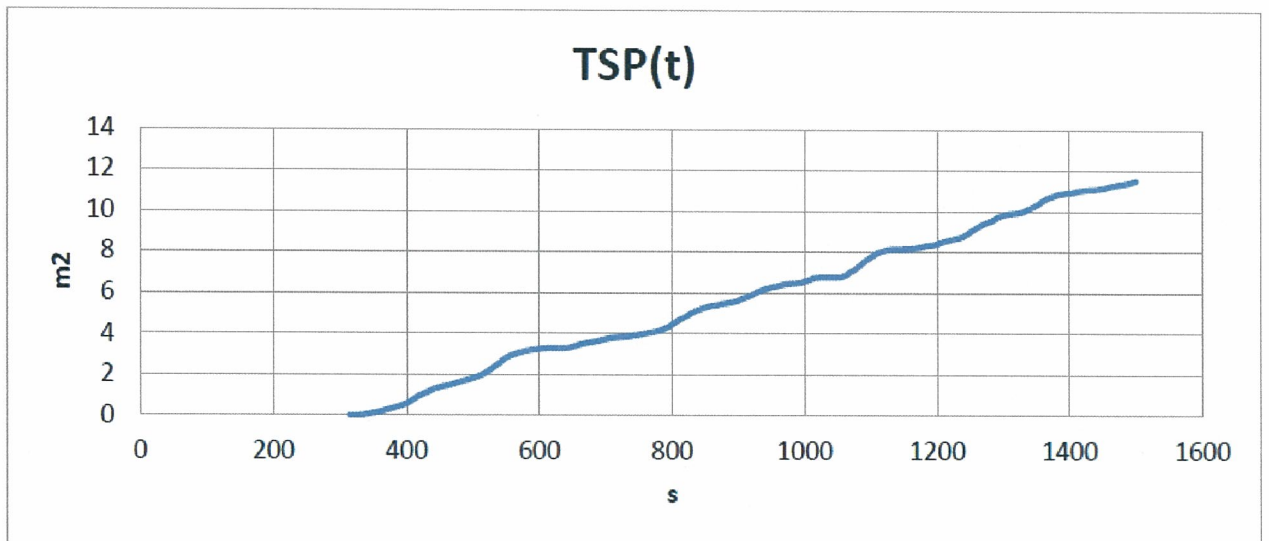
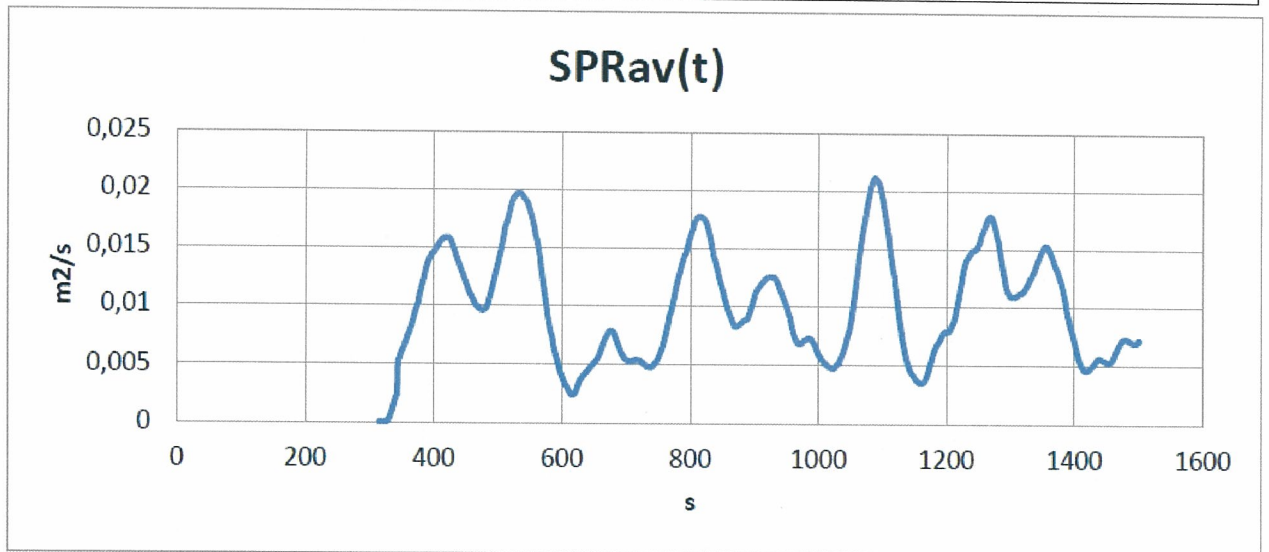
The photograph of the exposed surface taken from the opposite of corner line



The photograph of the test specimen after the testing







Test results

Test method	Parameter	Number of test	Results	
			Continuous parameter mean (m)	Compliance parameters
ČSN EN ISO 11925-2 exposition = 30 s	$F_s \leq 150 \text{ mm}^{(1)}$	6	yes	yes (B to D)
	$F_s \leq 150 \text{ mm}^{(2)}$	6	yes	yes (B to D)
	ignition of the filter paper	12	no	no (d0)
ČSN EN 13823	$FIGRA_{0,2 \text{ MJ}} \text{ (W/s)}$	3	37,0	≤ 120 (B)
	$LFS < \text{edge}$	3	yes	yes (B,C)
	$THR_{300 \text{ s}} \text{ (MJ)}$	3	5,5	$\leq 7,5$ (B)
	$SMOGR_A \text{ (m}^2/\text{s}^2)$	3	0	≤ 30 (s1)
	$TSP_{300 \text{ s}} \text{ (m}^2)$	3	6,7	≤ 50 (s1)
	flaming droplets / particles[s]	3	no	no (d0)

(1): surface flame attack
(2): edge flame attack

Classification and Direct field of application

Reference

This classification has been carried out in accordance with the clause 11.6, 11.9.2 and 11.10.1 of EN 13501-1+A1 : 2010

Classification

The product *Acryl Solid Surface*, in relation to its reaction to fire behaviour is classified:

B

The additional classification in relation to smoke production is:

s1

The additional classification in relation to flaming droplets/particles is:

d0

The format of the reaction to fire classification for *Acryl Solid Surface* is:

Fire behaviour		Smoke production			Flaming droplets	
B	-	s	1	,	d	0

Reaction to fire classification: B-s1, d0

Field of application

This classification is also valid for the following product parameters

- thickness: $\geq 12,3 \text{ mm}$

This classification is valid for the following end use conditions:

- fixed directly on the substrates of reaction to fire class at least A2-s1, d0 or A1