

The following sample(s) was / were submitted and identified on behalf of the client as:

Sample Description : RUBBER MAGNET/PVC
 SGS Ref. No. : CP16-013488GZ
 Sample Receiving Date : Mar.17, 2016
 Test Performing Date : Mar.17, 2016 to Mar.28, 2016

Test Result Summary

Test(s) Requested	Result(s)
EN 13501-1:2007+A1:2009	Classification: B - s1, d0
Summary:	
1. For further details, please refer to the following page(s).	

Signed for and on behalf of
 Shunde Branch
 SGS-CSTC Co., Ltd.



Ivette Zhang
 Approved signatory



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

1/F, 1st Building, European Industrial Park, No. 1 Shunhe Road, Wuxia Section, Dailing Town, Shunde, Foshan, Guangdong, China 528333 t (86-757) 22805888 f (86-757) 22805858 www.sgs.com.cn
 中国·广东·佛山市顺德区大良街道办事处五沙顺和南路1号欧洲工业园一号厂房首层 邮编: 528333 t (86-757) 22805888 f (86-757) 22805858 e sgs.china@sgs.com

TESTS AND RESULTS

Test Conducted:

This test is conducted as per EN 13501-1:2007+A1:2009 Fire classification of construction products and building elements — Part 1: Classification using data from reaction to fire tests, Class B. And the test methods as following:

1. EN 13823:2010 Reaction to fire tests for building products - Building products excluding floorings exposed to the thermal attack by a single burning item.
2. EN ISO 11925-2:2010 Reaction to fire tests — Ignitability of building products subjected to direct impingement of flame — Part 2: Single-flame source test.

Mounting and fixing (For EN 13823):

The sample was pasted on the standard substrate (calcium silicate boards with a density of 900 kg/m³) by glue.

Test Results:

Test method	Parameter	Number of tests	Results
EN 13823	FIGRA _{0.2MJ} (W/s)	3	60.6
	THR _{600s} (MJ)		1.8
	SMOGR (m ² /s ²)		1.4
	TSP _{600s} (m ²)		0.4
	LFS < edge of specimen		Yes
	Flaming particles or droplets		No
EN ISO 11925-2 Exposure = 30 s	F _s ≤ 150 mm	6	Yes
	Ignition of the filter paper		No

Remark:

FIGRA — Fire growth rate index used for classification purposes [W/s]

For the classes A2 and B, FIGRA_{0.2MJ}

For the classes C and D, FIGRA_{0.4MJ}

LFS — Lateral flame spread [m]

THR_{600s} — Total heat release within 600 s [MJ]

SMOGR — Smoke growth rate [m²/s²]

TSP_{600s} — Total smoke production within 600 s [m²]



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

1/F, 1st Building, European Industrial Park, No. 1 Shunhe Road, Wusha Section, Dailing Town, Shunde, Foshan, Guangdong, China 528333 t (86-757) 22805888 f (86-757) 22805858 www.sgs.com.cn
中国·广东·佛山市顺德区大良街道办事处五沙顺和南路1号欧洲工业园一号厂房首层 邮编: 528333 t (86-757) 22805888 f (86-757) 22805858 e sgs.china@sgs.com

Test Report

No. SDHL1603003304FB

Date: Mar.28, 2016

Page 3 of 5

Classification and direct field of application:

This classification has been carried out in accordance with EN 13501-1:2007+A1:2009.

Classification:

The product, "Rubber Magnet / PVC", classification is as following,

Fire behaviour		Smoke production		Flaming droplets	
B	—	s	1	d	0

Reaction to fire classification: B—s1, d0

Remark:

The classes with their corresponding fire performance are given in annex A.

Reaction to fire classification is based on the 7-step scale of A1 to F, where A1 is good and F is bad

Statement:

The test results relate to the behaviour of the test specimens 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 in use.

Warning:

This classification report does not represent type approval or certification of the product.

The test laboratory has, therefore, play no part in sampling the product for the test, although it holds appropriate references to the manufacturer's factory production control that is aimed to be relevant to the samples tested and that will provide for their traceability.

Annex A

Table 1 — Classes of reaction to fire performance for construction products excluding floorings and linear pipe thermal insulation products.

Class	Test method(s)	Classification criteria	Additional classification
A1	EN ISO 1182 ^a and	$\Delta T \leq 30^{\circ}\text{C}$, and $\Delta m \leq 50\%$, and $t_f = 0$ (i.e. no sustained flaming)	-
	EN ISO 1716	$PCS \leq 2.0\text{MJ/kg}$ ^a and $PCS \leq 2.0\text{MJ/kg}$ ^{b,c} and $PCS \leq 1.4\text{MJ/m}^2$ ^d and $PCS \leq 2.0\text{MJ/kg}$ ^e	-
A2	EN ISO 1182 ^a or	$\Delta T \leq 50^{\circ}\text{C}$, and $\Delta m \leq 50\%$, and $t_f \leq 20\text{ s}$	-
	and EN ISO 1716	$PCS \leq 3.0\text{MJ/kg}$ ^a and $PCS \leq 4.0\text{MJ/m}^2$ ^b and $PCS \leq 4.0\text{MJ/m}^2$ ^d and $PCS \leq 3.0\text{MJ/kg}$ ^e	-
	EN 13823	$FIGRA \leq 120\text{W/s}$ and $LFS < \text{edge of specimen}$ and $THR_{600s} \leq 7.5\text{MJ}$	Smoke production ^f and Flaming droplets/particles ^g



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

1F, 1st Building, European Industrial Park, No. 1 Shunshen Road, Wusha Section, Dailing Town, Shunde, Foshan, Guangdong, China 528333 t (86-757) 22805888 f (86-757) 22805858 www.sgsgroup.com.cn
中国·广东·佛山市顺德区大良街道办事处五沙顺和南路1号欧洲工业园一号厂房首层 邮编: 528333 t (86-757) 22805888 f (86-757) 22805858 e sgs.china@sgs.com

B	EN 13823 and	$FIGRA \leq 120W/s$ and $LFS < \text{edge of specimen}$ and $THR_{600s} \leq 7.5MJ$	Smoke production ^f and Flaming droplets/particles ^g
	EN ISO 11925-2 ⁱ Exposure =30s	$F_s \leq 150mm$ within 60 s	
C	EN 13823 and	$FIGRA \leq 250W/s$ and $LFS < \text{edge of specimen}$ and $THR_{600s} \leq 15MJ$	Smoke production ^f and Flaming droplets/particles ^g
	EN ISO 11925-2 ⁱ Exposure=30s	$F_s \leq 150mm$ within 60 s	
D	EN 13823 and	$FIGRA \leq 750W/s$	Smoke production ^f and Flaming droplets/particles ^g
	EN ISO 11925-2 ⁱ Exposure=30s	$F_s \leq 150mm$ within 60 s	
E	EN ISO 11925-2 ⁱ Exposure =15s	$F_s \leq 150mm$ within 20 s	flaming droplets/particles ^h
F	No performance determined		

^a For homogeneous products and substantial components of non-homogeneous products.

^b For any external non-substantial component of non-homogeneous products.

^c Alternatively, any external non-substantial component having a $PCS \leq 2,0 MJ/m^2$, provided that the product satisfies the following criteria of EN 13823: $FIGRA \leq 20 W/s$, and $LFS < \text{edge of specimen}$, and $THR_{600s} \leq 4,0 MJ$, and $s1$, and $d0$.

^d For any internal non-substantial component of non-homogeneous products.

^e For the product as a whole.

^f In the last phase of the development of the test procedure, modifications of the smoke measurement system have been introduced, the effect of which needs further investigation. This may result in a modification of the limit values and/or parameters for the evaluation of the smoke production.

$s1 = SMOGRA \leq 30m^2/s^2$ and $TSP_{600s} \leq 50m^2$; $s2 = SMOGRA \leq 180m^2/s^2$ and $TSP_{600s} \leq 200m^2$; $s3 = \text{not } s1 \text{ or } s2$

^g $d0 = \text{No flaming droplets/ particles in EN 13823 within 600 s;}$

$d1 = \text{no flaming droplets/ particles persisting longer than 10 s in EN 13823 within 600 s;}$

$d2 = \text{not } d0 \text{ or } d1.$

Ignition of the paper in EN ISO 11925-2 results in a $d2$ classification.

^h Pass = no ignition of the paper (no classification);

Fail = ignition of the paper ($d2$ classification).

ⁱ Under conditions of surface flame attack and, if appropriate to the end-use application of the product, edge flame attack.



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing/inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

1F, 1F Building, European Industrial Park, No. 1 Shunhe Road, Wusha Section, Daliang Town, Shunde, Foshan, Guangdong, China 528333 t (86-757) 22805888 f (86-757) 22805858 www.sgsgroup.com.cn
中国·广东·佛山市顺德区大良街道办事处五沙顺和南路1号欧洲工业园一号厂房首层 邮编: 528333 t (86-757) 22805888 f (86-757) 22805858 e sgs.china@sgs.com

SAMPLE INFORMATION AND PICTURES

Thickness: About 0.5mm

Mass per unit area: About 1.80 kg/m²

Test Face: White Face



Before Test (EN 13823)



After Test (EN 13823)

End of Report



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

1/F, 1st Building, European Industrial Park, No.1 Shunhean Road, Wuxia Section, Dalang Town, Shunde, Foshan, Guangdong, China 528333 t (86-757)22805888 f (86-757)22805858 www.sgsgroup.com.cn
中国·广东·佛山市顺德区大良街道办事处五沙顺和南路1号欧洲工业园一号厂房首层 邮编: 528333 t (86-757)22805888 f (86-757)22805858 e sgs.china@sgs.com