

## Flexible Pipe Quick Connector and Couplings Parameters

Material: PA (polyamide)

Thread type: PG/Metric

Working temperature: -20~+110°C

Flame retardant grade: UL94-V0

Protection degree: IP66, using suitable seal ring

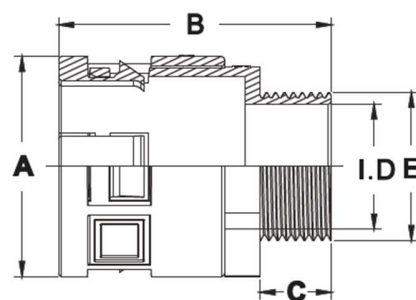
Color: Black. Other colors are customizable

Property: Special design with inner locking buckle making the mounting and dismounting done by simple plugging or pulling, without using tools.



Physical property form									
Character	Material	Working temperature	Flame retardant rating UL94				Level of protection	ROHS	Color
			HB	V-2	V-1	V-0			
074	PA	-20°C~+110°C		√			IP66		Black
076	PA	-20°C~+110°C				√	IP66	√	Black

PG Flexible pipe's quick connector from								
Model	Pipe Specification	Thread Specification	ID(mm)	A(mm)	B(mm)	C(mm)	E(mm)	Package(m/coil)
JF10W	1/4"(10mm)	PG7	7.5	17.5	30.5	10	12.5	100
JF13W	5/16"(13mm)	PG9	10.5	20.5	37	12	15.2	50
JF15W	3/8"(15.8mm)	PG11	14	23	37	12	18.6	50
JF18W	18.5mm	PG13.5	16	28	44	12	20.4	50
JF21W	1/2"(21.2mm)	PG16	17	30	44	13	22.5	50
JF25W	25mm	PG21	22.5	34	46	14	28.3	25
JF28W	3/4"(28.5mm)	PG21	22.5	37	46	14	28.3	25
JF34W	1"(34.5mm)	PG29	30	44	48	15	37	20
JF42W	1-1/4"(42.5mm)	PG36	37	53	48	15	47	20
JF54W	2"(54.5mm)	PG48	48	67	52	17	59.3	10
Metric Flexible pipe's quick connector from								
Model	Pipe Specification	Thread Specification	ID(mm)	A(mm)	B(mm)	C(mm)	E(mm)	Package(m/coil)
JF10WM	1/4"(10mm)	M10*1.5	6.5	17.5	30.5	12	10	100
JF13WM	5/16"(13mm)	M12*1.5	8.5	20.5	37	12	12	50
JF15WM	3/8"(15.8mm)	M16*1.5	12.5	23	37	12	16	50
JF18WM	18.5mm	M20*1.5	16	28	44	14	20	50
JF21WM	1/2"(21.2mm)	M20*1.5	15	30	44	14	20	50
JF25WM	25mm	M25*1.5	21	34	46	14	25	25
JF28WM	3/4"(28.5mm)	M25*1.5	21	37	46	15	32	20
JF34WM	1"(34.5mm)	M32*1.5	27.5	44	48	15	32	20
JF42WM	1-1/4"(42.5mm)	M40*1.5	35.5	53	48	16	40	20
JF54WM	2"(54.5mm)	M50*1.5	44	67	52	16	50	10



## Flexible Pipe Couplings Parameters

Material: TPR Rubber

Working temperature: -40~+110°C

Flame retardant grade: UL94-V0

Protection degree: IP66

Color: Black. Other colors are customizable

Property: flexible and environmental protection

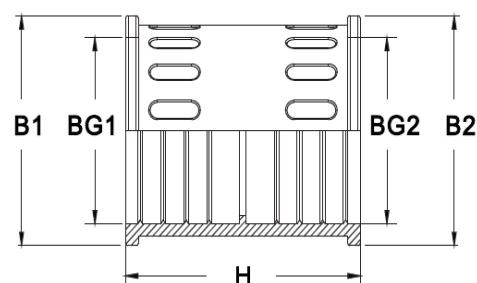


Physical property form

Character	Material	Working temperature	Flame retardant rating UL94				Level of protection	ROHS	Color
			HB	V-2	V-1	V-0			
069	TPR Rubber	-20°C~+110°C	V				IP66		Black

Couplings dimensions

Model	Pipe Specification (BG1=BG2)	(B1=B2mm)	H(mm)	Package(m/coil)
JF10H	1/4"(10mm)	17	34	50
JF13H	5/16"(13mm)	20	37	50
JF15H	3/8"(15.8mm)	23	45	50
JF18H	18.5mm	26	48	50
JF21H	1/2"(21.2mm)	29	48	50
JF25H	25mm	33	48	25
JF28H	3/4"(28.5mm)	36	48	25
JF34H	1"(34.5mm)	42	48	25
JF42H	1-1/4"(42.5mm)	51	60	20
JF54H	2"(54.5mm)	63	70	10



# Test Report

No. CANML1412639301

Date: 04 Aug 2014

Page 1 of 5

GUANGZHOU JIEFA ELECTRICAL TECHNOLOGY CO., LTD.

NO.1, FUYONG ROAD, HUANGGE TOWN, NANSHA DISTRICT, GUANGZHOU CITY, GUANGDONG PROVINCE  
CHINA

**This report is to supersede test report CANML1410368901**

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

SGS Job No. : GZIN1406016478PC-01 - GZ

Internal Reference No. : GZIN1406016438PS-01

Tested Sample Info. : JF25

Client Ref. Info. : quick connector, quick elbow connector  
JF××××-076

Date of Sample Received : 30 Jun 2014

Testing Period : 30 Jun 2014 - 03 Jul 2014

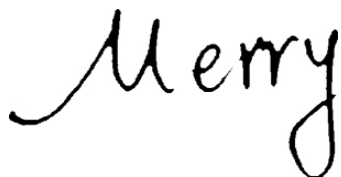
Test Requested : Selected test(s) as requested by client.

Test Method : Please refer to next page(s).

Test Results : Please refer to next page(s).

Conclusion : Based on the performed tests on submitted sample(s), the results of Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs) comply with the limits as set by RoHS Directive 2011/65/EU Annex II; recasting 2002/95/EC.

Signed for and on behalf of  
SGS-CSTC Ltd.



Merry Lv  
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-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.

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](mailto:CN.Doccheck@sgs.com)

198 Kezhu Road, Sciencetech Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075113 www.sgsgroup.com.cn  
中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 f (86-20) 82075113 e [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Test Report

No. CANML1412639301

Date: 04 Aug 2014

Page 2 of 5

Test Results :

### Test Part Description :

Specimen No.	SGS Sample ID	Description
SN1	CAN14-126393.001	Black plastic

Remarks :

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected ( < MDL )
- (4) "-" = Not Regulated

### RoHS Directive 2011/65/EU

- Test Method :
- (1) With reference to IEC 62321-5:2013, determination of Cadmium by ICP-OES.
  - (2) With reference to IEC 62321-5:2013, determination of Lead by ICP-OES.
  - (3) With reference to IEC 62321-4:2013, determination of Mercury by ICP-OES.
  - (4) With reference to IEC 62321:2008, determination of Hexavalent Chromium by Colorimetric Method using UV-Vis.
  - (5) With reference to IEC 62321:2008, determination of PBBs and PBDEs by GC-MS.

Test Item(s)	Limit	Unit	MDL	001
Cadmium (Cd)	100	mg/kg	2	ND
Lead (Pb)	1,000	mg/kg	2	ND
Mercury (Hg)	1,000	mg/kg	2	ND
Hexavalent Chromium (CrVI)	1,000	mg/kg	2	ND
Sum of PBBs	1,000	mg/kg	-	ND
Monobromobiphenyl	-	mg/kg	5	ND
Dibromobiphenyl	-	mg/kg	5	ND
Tribromobiphenyl	-	mg/kg	5	ND
Tetrabromobiphenyl	-	mg/kg	5	ND
Pentabromobiphenyl	-	mg/kg	5	ND
Hexabromobiphenyl	-	mg/kg	5	ND
Heptabromobiphenyl	-	mg/kg	5	ND
Octabromobiphenyl	-	mg/kg	5	ND
Nonabromobiphenyl	-	mg/kg	5	ND
Decabromobiphenyl	-	mg/kg	5	ND
Sum of PBDEs	1,000	mg/kg	-	ND
Monobromodiphenyl ether	-	mg/kg	5	ND



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.

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](mailto:CN.Doccheck@sgs.com)

198 Kezhu Road, Sciencetech Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075113 www.sgs.com.cn  
中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 f (86-20) 82075113 e [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## Test Report

No. CANML1412639301

Date: 04 Aug 2014

Page 3 of 5

<u>Test Item(s)</u>	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>001</u>
Dibromodiphenyl ether	-	mg/kg	5	ND
Tribromodiphenyl ether	-	mg/kg	5	ND
Tetrabromodiphenyl ether	-	mg/kg	5	ND
Pentabromodiphenyl ether	-	mg/kg	5	ND
Hexabromodiphenyl ether	-	mg/kg	5	ND
Heptabromodiphenyl ether	-	mg/kg	5	ND
Octabromodiphenyl ether	-	mg/kg	5	ND
Nonabromodiphenyl ether	-	mg/kg	5	ND
Decabromodiphenyl ether	-	mg/kg	5	ND

### Notes :

- (1) The maximum permissible limit is quoted from the directive 2011/65/EU, Annex II



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.

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](mailto:CN.Doccheck@sgs.com)

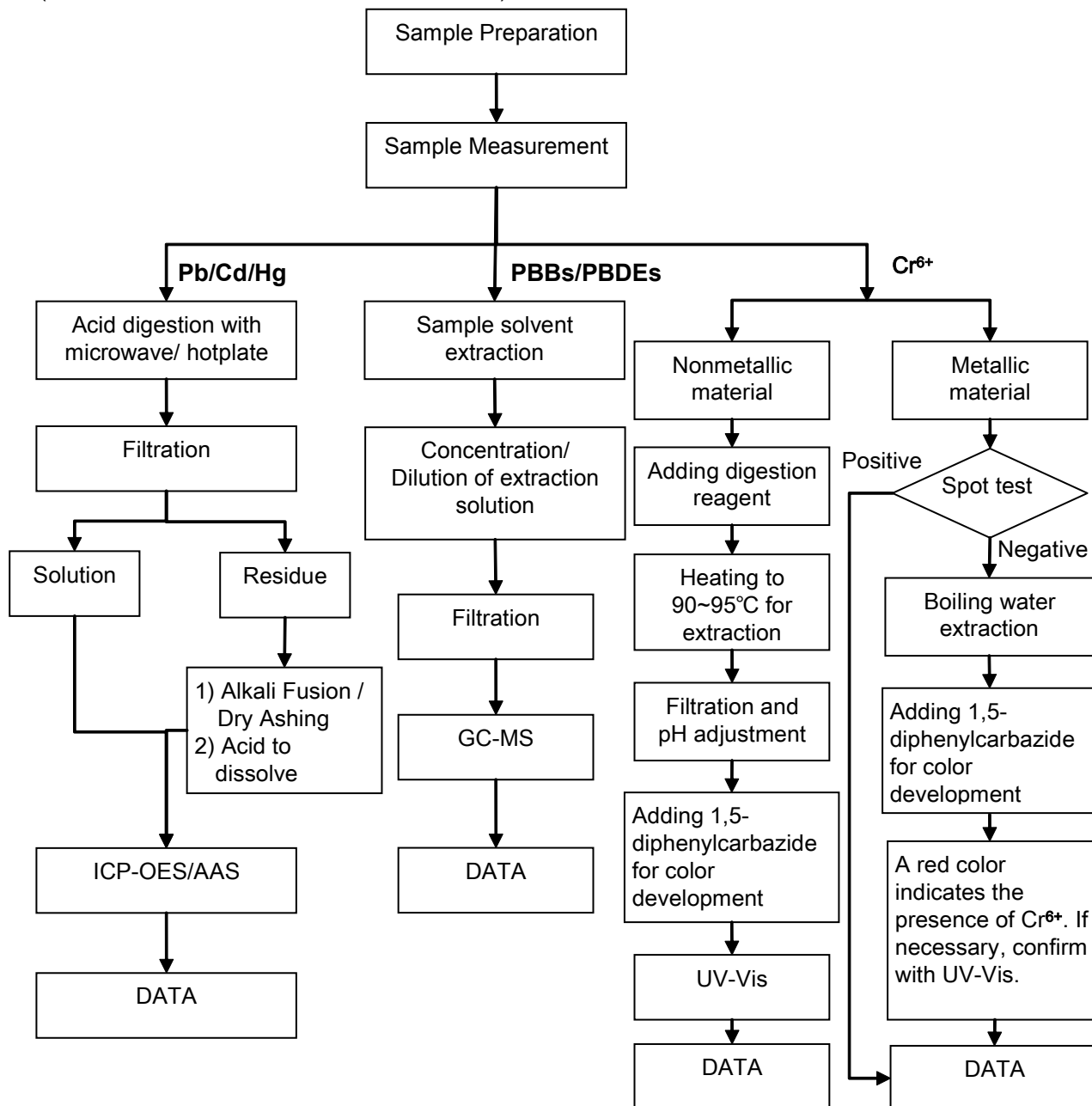
198 Kezhu Road, Sciencetech Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155555 f (86-20) 82075113 www.sgsgroup.com.cn  
中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 f (86-20) 82075113 e [sgs.china@sgs.com](mailto:sgs.china@sgs.com)



### ATTACHMENTS

#### RoHS Testing Flow Chart

- 1) Name of the person who made testing: Bruce Xiao / Sunny Hu
- 2) Name of the person in charge of testing: Bella Wang / Cutey Yu
- 3) These samples were dissolved totally by pre-conditioning method according to below flow chart (Cr<sup>6+</sup> and PBBs/PBDEs test method excluded).



## Test Report

No. CANML1412639301

Date: 04 Aug 2014

Page 5 of 5

Sample photo:



SGS authenticate the photo on original report only

\*\*\* End of Report \*\*\*



## TEST REPORT

No. : GZIN1406016437PS-03

Date : Aug 05, 2014

Page: 1 of 4

CUSTOMER NAME: GUANGZHOU JIEFA ELECTRICAL TECHNOLOGY CO.,LTD  
ADDRESS: NO.1, FUYONG ROAD, HUANGGE TOWN, NANSHA DISTRICT,  
GUANGZHOU CITY, GUANGDONG PROVINCE

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

Sample Name : BELLOWS HOLDER  
SGS Ref. No. : GZIN1406016453MR  
Product Specification : JF25  
Product or Lot No. : 1461  
Other Information : BELLOWS HOLDER,QUICK CONNECTOR,QUICK ELBOW  
CONNECTOR  
JF×...×-076  
Date of Receipt : Jun 30, 2014  
Testing Start Date : Jun 30, 2014  
Testing End Date : Jul 11, 2014  
Test result(s) : For further details, please refer to the following page(s)

Signed for  
SGS-CSTC Standards Technical  
Services Co., Ltd. GZ Branch Testing  
Center

Eleain Fan  
Authorized 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](mailto:CN.Doccheck@sgs.com)

SGS-CSTC Standards Technical Services Co., Ltd.  
Guangzhou Branch Testing Center Materials Laboratory

198 Kezhu Road, Science Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155661 f (86-20) 82075080 www.ssgroup.com.cn  
中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155661 f (86-20) 82075080 e [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

Member of the SGS Group (SGS SA)



## TEST REPORT

No. : GZIN1406016437PS-03

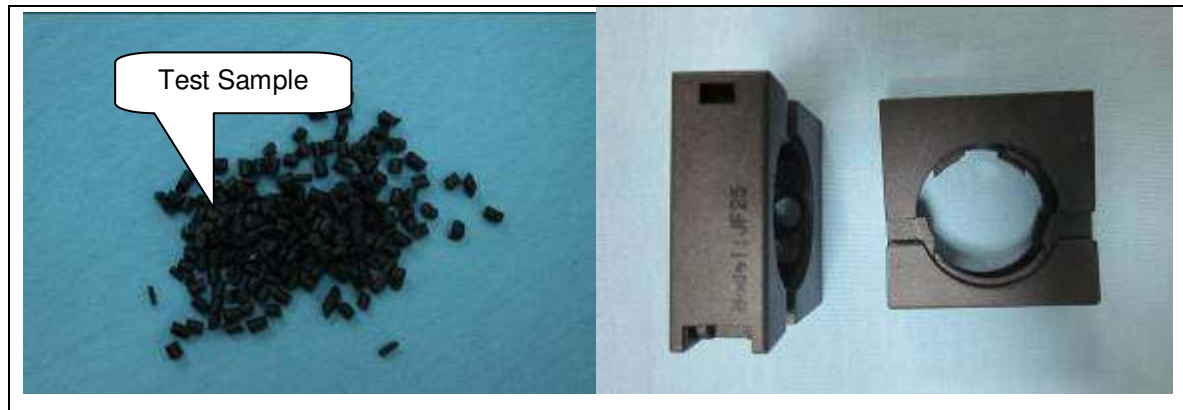
Date : Aug 05, 2014

Page: 2 of 4

No.	Test Item	Test Method	Result	Conclusion
1	Vertical Burning	UL 94-2013 Section 8	V-0	/

Note: Pass : Meet the requirements;  
Fail : Does not meet the requirements;  
/ : Not Apply to the judgment.

Original Sample Photo:



# TEST REPORT

No. : GZIN1406016437PS-03

Date : Aug 05, 2014

Page: 3 of 4

Test Item: Vertical Burning

Sample Description: Raw material

Test Method: UL 94-2013 Section 8

Test Condition:

Specimen: 127 mm×12.6 mm×3.2 mm

Test Result:

Conditioning	23±2℃, 50±5%RH, 48h					70±2℃, 168h→ Desiccator, 23±2℃, 4h				
Specimen	1	2	3	4	5	1	2	3	4	5
Afterflame time after first flame application (s), t <sub>1</sub>	0	0	0	0	0	0	0	0	0	0
Afterflame time after second flame application (s), t <sub>2</sub>	0.3	0.4	0.5	0.7	0.5	0.7	0.6	0.7	0.8	0.9
Afterglow time after second application (s), t <sub>3</sub>	0	0	0	0	0	0	0	0	0	0
Total afterflame time for any condition set (s), t <sub>1</sub> +t <sub>2</sub>	2.4					3.7				
Afterflame time plus afterglow time after second flame application (s), t <sub>2</sub> +t <sub>3</sub>	0.3	0.4	0.5	0.7	0.5	0.7	0.6	0.7	0.8	0.9
Whether or not specimens progressed up to the holding clamp	No	No	No	No	No	No	No	No	No	No
Whether or not specimens drip flaming particles and whether the particles ignited the cotton indicator	No	No	No	No	No	No	No	No	No	No

Classification: V-0(See table 1)



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](mailto:CN.Doccheck@sgs.com)

198 Kezhu Road, Science Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155661 f (86-20) 82075080 www.sgsgroup.com.cn  
中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155661 f (86-20) 82075080 e [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

## TEST REPORT

No. : GZIN1406016437PS-03

Date : Aug 05, 2014

Page: 4 of 4

Table 1

Criteria conditions	V-0	V-1	V-2
Afterflame time for each individual specimen $t_1$ or $t_2$	$\leq 10s$	$\leq 30s$	$\leq 30s$
Total afterflame time for any condition set ( $t_1+t_2$ for 5 specimens)	$\leq 50s$	$\leq 250s$	$\leq 250s$
Afterflame plus afterglow time for each individual specimen after the second flame application ( $t_2+t_3$ )	$\leq 30s$	$\leq 60s$	$\leq 60s$
Afterflame or afterglow of any specimen progress up to the holding clamp	No	No	No
Cotton indicator ignited by flaming particles or drops	No	No	Yes

Note:1.Test specimens were injection molded.

2. This test report replaces test report No. GZIN1406016437PS-02.

\*\*\*\*\* 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](mailto:CN.Doccheck@sgs.com)

198 Kezhu Road, Science Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86-20) 82155661 f (86-20) 82075080 www.sgs.com.cn  
中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155661 f (86-20) 82075080 e [sgs.china@sgs.com](mailto:sgs.china@sgs.com)