

No.: SHIN1411049982MR

Date: Dec 05, 2014

Page: 1 of 5

CUSTOMER NAME: SUZHOU VOLSUN ELECTRIONICS TECHNOLOGY CO., LTD

ADDRESS: BUILDING 5, JINXING FUMIN INDUSTRIAL PARK, 413 MUDONG

ROAD, MUDU TOWN, SUZHOU CITY, JIANGSU PROVINCE, CHINA

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

Sample Name : Heat shrinkable identification sleeves

中国・上海・浦东康桥东路1159弄69号

SGS Ref. No. : SHIN1411049954PS

SUZPL141101944

Date of Receipt : Nov 26, 2014
Testing Start Date : Nov 26, 2014
Testing End Date : Dec 05, 2014

Test result(s) : For further details, please refer to the following page(s)

Signed for

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

Cathy Wu

Authorized signatory



t (86-21) 61196300

f (86-21) 68183122/68183920 e sgs.china@sgs.com



No.: SHIN1411049982MR

Date: Dec 05, 2014

Page: 2 of 5

### Summary of Results:

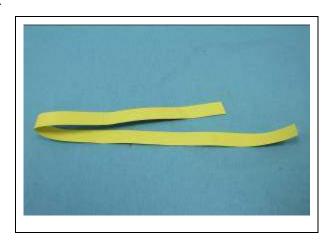
No.	Test Item	Test Method	Result	Conclusion
1	VW-1 Flame	UL 224-2006 REV.2:2010 Section 5.11	VW-1	Pass

Note: Pass: Meet the requirements;

Fail: Does not meet the requirements;

/ : Not Apply to the judgment.

### Original Sample Photo:







No.: SHIN1411049982MR

Date: Dec 05, 2014

Page: 3 of 5

Test Item: VW-1 Flame

Sample Description: See photo

Test Method: UL 224-2006 REV.2:2010 Section 5.11

**Test Condition:** 

Heat-shrinkable condition: 200°C, 3 min

Specimen: Length: 660 mm, Inside diameter: 3.89 mm

Steel wire diameter: 0.81 mm

Conditioning: 23±2 °C, 50±5 %RH, 48 h



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-a-Document.aspx</a>. Attention is drawn for to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advested that information contained hereon reflects the Company's Indinging 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 excrosing 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 atteration, foregry 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: CRI. Doccheck@ags.com

No.69, Block 1159, East Kang Qiao Road, Pudong District, Shanghai, China 201319 中国・上海・浦东康桥东路1159弄69号

t (86-21) 61196300 f (86-21) 68183122/68183920 e sgs.china@sgs.com

t (86-21) 61196300 f (86-21) 68183122/68183920 www.sgsgroup.com.cn



No.: SHIN1411049982MR

Date: Dec 05, 2014

Page: 4 of 5

#### Test Result:

Specimen	1			2				3							
Number of Flame application	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Flame time or glow time after each application (s)	13.8	14.9	16.2	22.1	9.1	6.5	20.0	30.2	30.1	24.4	11.7	10.7	31.4	39.8	10.8
Whether or not any															
specimen continues to															
flame or glow longer															
than 60 seconds after	No			No			No								
removal of the burner															
flame following any															
application															
Whether or not any															
specimen shows more									No						
than 25 percent of the	No			No											
indicator flag burned															
away or charred															
Whether or not any										No					
specimen emits flaming															
or glowing particles or	No			No											
flaming drops at any															
time that ignite the															
cotton															
	Can't convey flame along its length.(See note 1)														
Judgment	2. Can't convey flame to combustible materials in its vicinity.(See note 2 and 3)														



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is antiqued 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 atteration, 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: CR. Doccheck@sqs.com

No.69, Block 1159, East Kang Qiao Road, Pudong District, Shanghai, China 201319 中国・上海・浦东康桥东路1159弄69号

t (86-21) 61196300 f (86-21) 68183122/68183920 www.sgsgroup.com.cn

t (86-21) 61196300 f (86-21) 68183122/68183920 e sgs.china@sgs.com



No.: SHIN1411049982MR

Date: Dec 05, 2014

Page: 5 of 5

#### VW-1 requirements:

1. Shall not flame or glow longer than 60 seconds following any of the five 15 seconds applications of the test flame, and

2. Shall not ignite combustible materials in its vicinity or damage more than 25 percent of the indicator flag during, between, or after the five applications of the test flame.

Classification: VW-1

Client's requirement: VW-1

Conclusion: Pass

Note:

- 1. Where any specimen shows more than 25 percent of the indicator flag burned away or charred (soot that can be removed with a cloth or the fingers and brown scorching shall be ignored) after any of the five applications of flame, the tubing shall be considered capable of conveying flame along its length.
- 2. Where any specimen emits flaming or glowing particles or flaming drops at any time that ignite the cotton on the burner, wedge, or floor of enclosure (flameless charring of the cotton shall be ignored), the tubing shall be considered capable of conveying flame to combustible materials in its vicinity.
- 3. Where any specimen continues to flame or glow longer than 60 seconds after any application of the gas flame, the tubing shall be considered capable of conveying flame to combustible materials in its vicinity.
- 4. Test specimens were cut from the sample.
- The test was performed by SGS internal laboratory.

\*\*\*\*\*\* End of report\*\*\*\*\*\*

