



TEST REPORT



No.: WT175006043

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Sample Description: Acrylonitrile Butadiene Styrene (ABS)

Model/Specification/Grade: Halogen free flame retardant ABS

Applicant: Shenzhen Esun Industrial Co., Ltd.

Applicant Address: Wuhan University Building A403-I, No.6 Yuexing2Road, Nanshan District, Shenzhen, China

Date of Receipt: 2017-08-03

Test Period: 2017-08-03 to 2017-08-15

Test Location: Longgang Fire Testing Center

Shenzhen Academy of
Metrology & Quality Inspection
(Stamp)

Approved by: 何益壮 (所长)

Issue Date: 2017-08-15

Signature:

Shenzhen Academy of Metrology & Quality Inspection <http://www.smq.com.cn> E-mail: kfzx@smq.com.cn

Xili Experimental Base: No. 4 Tongfa Road, Nanshan District, Shenzhen Tel: 0755-86009898 Post Code: 518055

Longzhu Experimental Base: Metrology and Quality Inspection Building, Central Section of Longzhu Road, Nanshan District, Shenzhen
Tel: 0755-26941618 26941617 Fax: 0755-26941615 26941547 Post Code: 518055

Longhua Experimental Base: North to Minkang Road, Minzhi Avenue, Bao'an District, Shenzhen
Tel: 0755-27528955 27528969 Fax: 0755-27528707 Post Code: 518131

Longgang Fire Testing Center: Tower 3, Xinhe Road 109, Baolai Industrial Park, Shangmugu Community, Pinghu Street, Longgang District, Shenzhen Tel: 0755-89325252 Fax: 0755-89325282 Post Code: 518111

Important statement

1. The academy is a non profit and legal technical institute authorized by Shenzhen Municipal Government to undertake the quality supervision and inspection of products; provides technical support to relevant supervision administration and also conducts commission test from society.
2. The academy was set up in 1998 through the consolidation of by Shenzhen Institute of Quality Supervision and Testing and Shenzhen Institute of Metrology and Testing.
3. The academy ensures that all testing are carried out scientifically, impartially and accurately, also guarantees the confidential of the samples and the technical documents.
4. The sampling should be carried out according to the "sampling procedure" in the Procedure File CX22-01 and the stipulation of the inspection rules.
5. Any reports without the signature, or audited, or without the special seal are considered invalidated. Copying or using select parts, or tampering with this document without the permission of our academy is forbidden.
6. The results of the commission test are only valid to the submitted samples. The sample information and the client information are provided by the applicant. The academy is not responsible for the integrity of the sample and its accuracy of identification information.
7. Applicant is not allowed to propagate with the test result without the agreement of the test institution.
8. Any objections to the report should be submitted in 15 days since the issuing of the report.

Establishment of following institutions

National Hi-tech Metrology Station

National Digital Electronic Product Testing Center

National Sporting Goods Testing Center (Guangdong)

National Data Center for City Energy Measurement (Shenzhen)

CNLIC Quality Supervision and Inspection Institution for Furniture Products (Shenzhen)

Guangdong Quality Supervision and Inspection Institution for Furniture Products (Shenzhen)

Guangdong Quality Supervision and Inspection Institution for Food (Shenzhen)

Guangdong Quality Supervision and Inspection Institution for Generic Cabling System

Guangdong Quality Supervision and Inspection Institution for Bicycle Quality

Guangdong Quality Supervision and Inspection Institution for Electromagnetic Compatibility

Guangdong Quality Supervision and Inspection Institution for Leather Products

Guangdong Quality Supervision and Inspection Institution for Ecological Textile and Garment Products (Shenzhen)

Guangdong Quality Supervision and Inspection Institution for Horological Products (Shenzhen)

Shenzhen Quality Inspection Institution for Fiber and Textile

Shenzhen Quality Supervision and Inspection Institution for Building Materials

Shenzhen Testing Center for Burning Behavior of Fire Protection Products

Complaint Tel: 0755-26941613 (Longzhu) 0755-27528392 (Longhua)



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Sample Information:

Sample Description: Acrylonitrile Butadiene Styrene (ABS)
Trade Mark: eABS MAX
Model/Specification/Grade: Halogen free flame retardant ABS
Serial/Batch No. of Sample: -----
Manufactured Date: 2017.07
Manufacturer: Shenzhen Esun Industrial Co., Ltd.
Manufacturer Address: -----
Sample Quantity: 20pcs
Sample Description before Testing: Normal

Client Information:

Applicant: Shenzhen Esun Industrial Co., Ltd.
Applicant Address: Wuhan University Building A403-I, No.6 Yuexing2Road, Nanshan District, Shenzhen, China
Applicant Telephone: 13697127911
Applicant Post Code: -----

Test Information:

Date of Receipt: 2017-08-03
Applicant No.: 5451765
Environment Condition: (23~28) °C (50~65) %RH
Sampling Method: Delivered by Applicant
Test Method(s): UL 94-2013 Tests for Flammability of Plastic Materials for Parts in Devices and Appliances

Test Conclusion:

The test results are compliant with the requirements of UL 94-2013 50W(20mm) Vertical Burning Test V-0.

Tested by:

匡龙

匡龙

Checked by:

杨鸿军

杨鸿军



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1 Specimen Description

1.1 Color: black.

1.2 Thickness: 1.5mm.

2 Test Records

50W (20mm) Vertical burning test

Conditioning 1(Temperature:23℃±2℃;Relative humidity:50%±5%;Time:48h)

Criteria				Results				
Items	Classifications							
	V-0	V-1	V-2					
t1(s)	≤10	≤30	≤30	0	0	0	0	0
t2(s)				0	1.1	0.8	0.6	0.5
t3(s)	——	——	——	0	0	0	0	0
tf(s)	≤50	≤250	≤250	3.0				
t2+t3(s)	≤30	≤60	≤60	0	1.1	0.8	0.6	0.5
A	No	No	No	No	No	No	No	No
B	No	No	Yes	No	No	No	No	No
				Compliant with the requirements of V-0				

Conditioning 2(Temperature:70℃±2℃;Time:168h;Cooled at room temperature:4h)

Criteria				Results				
Items	Classifications							
	V-0	V-1	V-2	1#	2#	3#	4#	5#
t1(s)	≤10	≤30	≤30	0	0	2.1	0	0
t2(s)				2.4	3.6	5.6	3.2	2.1
t3(s)	—	—	—	0	0	0.6	0	0.5
tf(s)	≤50	≤250	≤250	20.1				
t2+t3(s)	≤30	≤60	≤60	2.4	3.6	6.2	3.2	2.6
A	No	No	No	No	No	No	No	No
B	No	No	Yes	No	No	No	No	No
				Compliant with the requirements of V-0				

t1: afterflame time after first flame application



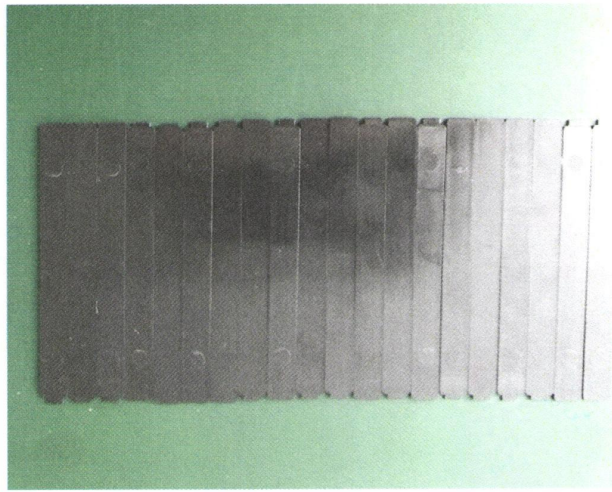
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t2: afterflame time after second flame application
t3: afterglow time after second flame application
tf: total afterflame time for any condition set
t2+t3: afterflame plus afterglow time for each individual specimen after the second flame application
A: afterflame or afterglow of any specimen up to the holding clamp
B: cotton indicator ignited by flaming particles or drops

3. Pictures



4. Results

The test results are compliant with the requirements of UL 94-2013 50W(20mm) Vertical Burning Test V-0.

5. Statement

The test results may be used for comparing the relative burning characteristics of different materials, or assessing any change in burning characteristics prior to, or during, use. But assessment for risk of fire shall take into account such factors as fuel contribution, intensity of burning(rate of heat release), products of combustion and environmental factors such as the intensity of source, orientation of exposed material and ventilation conditions. So the test results is not intended to provide correlation with performance under actual service conditions.

(The end)