

EN71 CERTIFICATE

Sunmicrotek and 3rd party(SGS) provide the certification of compliance below;

Certificate No.

F690101/LF-CTSAYHA19-07087
SGS File No. AYHA19-07087

Product Description

Heat Transfer Vinyl PU(SPU)

Issued Date

2019. 06. 19

Test Requested

EN71-3:2013 + A3:2018 - Migration of certain elements
(By all conclusive testing)

Conclusion

PASS

Manufacturer

SUNMICROTEK CO., LTD.
#1107 Gayang techno town
217 Heojun-ro, Seoul
Korea

Approved 3rd Party Test Laboratory

322, The O valley, 76, LS-ro, Dongan-gu, Anyang-si,
Gyeonggi-do, Korea 14117
SGS Korea Co., Ltd.
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SGS

Certification

Test Item	Result(mg/kg)
Mass of trace amount (mg)	-
Soluble Aluminium (Al)	ND
Soluble Antimony (Sb)	ND
Soluble Arsenic (As)	ND
Soluble Barium (Ba)	ND
Soluble Boron (B)	ND
Soluble Cadmium (Cd)	ND
Soluble Chromium (Cr)	0.55
Soluble Chromium III (Cr III)	ND
Soluble Chromium VI (Cr VI)	ND
Soluble Cobalt (Co)	ND
Soluble Cooper (Cu)	ND
Soluble Lead (Pb)	ND
Soluble Manganese (Mn)	ND
Soluble Mercury (Hg)	ND
Soluble Nickel (Ni)	ND
Soluble Selenium (Se)	ND
Soluble Strontium (Sr)	ND
Soluble Tin (Sn)	ND

Test Item

Soluble Organic Tin ND
Soluble Zinc (Zn) ND

Conclusion **PASS**

Test Item	Soluble Organic Tin Result(s) (mg/kg)	MDL(mg/kg)
Methyl tin (MeT)	ND	0.5
Di-n-propyl tin (DProT)	ND	0.5
Butyl tin (BuT)	ND	0.5
Tributyl tin (TBT)	ND	0.5
n-Octyl tin (MOT)	ND	0.5
Terabutyl tin (TeBT)	ND	0.5
Diphenyl tin (DPhT)	ND	0.5
Di-n-octyl tin (DOT)	ND	0.5
Triphenyl tin(TPhT)	ND	0.5

SGS

Records Contact

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CPSIA CERTIFICATE

Sunmicrotek and 3rd party(SGS) provide the certification of compliance below;
In accordance with section 14(g) of the consumer product safety act, 15 U.S.C §2063(g)

Certificate No.

F690101/LF-CTSAYHA19-06915
SGS File No. AYHA19-06915

Product Description

Heat Transfer Vinyl PUFF PU(SPUF)

Issued Date

2019. 06. 14

Test Part

CPSIA section 101(a)(2) – Lead in accessible substrate materials
CPSIA section 108 - Phthalates

Manufacturer

SUNMICROTEK CO., LTD.
#1107 Gayang techno town
217 Heojun-ro, Seoul
Korea

Approved 3rd Party Test Laboratory

322, The O valley, 76, LS-ro, Dongan-gu, Anyang-si,
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Certification

Test Item	CAS No.	Result(s)
Dibutyl Phthalate (DBP)	84-74-2	ND
Benzylbutyl Phthalate (BBP)	85-68-7	ND
Bis-(2-ethylhexyl) Phthalate (DEHP)	117-81-7	ND
Di-isononyl Phthalate (DINP)	28553-12-0 / 68515-48-0	ND
Di-cyclohexylphthalate (DCHP)	84-61-7	ND
Di-n-Hexylphthalate (DnHP)	84-75-3	ND
Diisobutyl Phthalate (DIBP)	84-69-5	ND
Di-n-pentylPhthalate (DnPP)	131-18-0	ND

Conclusion

PASS

Records Contact

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Test Report

No. F690101/LF-CTSAYHA19-06915

Issued Date : 2019. 06. 14

Page 1 of 4

SUNMICROTEK CO., LTD
 1107 Gayang Techno Town, 217
 Heojun-ro, Gangseo-gu, Seoul
 Korea

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

SGS File No. : AYHA19-06915
Sample Description : SPUF
Style no./Item no. : -
Order No. : -
Buyer : -
Manufacturer : -
Country of Origin : KOREA
Country of Destination : -
Received Date : 2019. 06. 07
Test Period : 2019. 06. 07 to 2019. 06. 14
Test Requested : As specified by client, selected parts of the submitted sample(s) for compliance with Public Law 110-314 (Consumer Product Safety Improvement Act of 2008, CPSIA):-
 1) Lead in accessible substrate materials
 2) Phthalates
Test Method and Results : For further details, please refer to following page (s)
Result Summary :

<u>Item</u>	<u>Test Parameter</u>	<u>Conclusion</u>
1	CPSIA section 101(a)(2) - Lead in accessible substrate materials	PASS
2	CPSIA Section 108 - Phthalate content	PASS

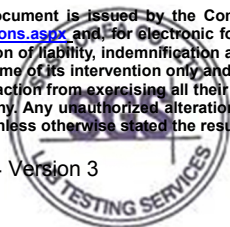
Remark: Test results in this report are applicable for the item tested and reflects the tested sample as received.

SGS Korea Co., Ltd.



Tommy Oh / Chemical Lab Mgr

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Test Report

No. F690101/LF-CTSAYHA19-06915

Issued Date : 2019. 06. 14

Page 2 of 4

Results :

1) Lead in accessible substrate materials

Test Method (non-metallic materials): With reference to CPSC-CH-E1002-08.3. Analysis was performed by ICP-OES.

Test Item	Result(s)	Permissible Limit
	<u>1</u>	
Lead (Pb)	N. D.	0.01 %
Conclusion	PASS	--

Sample Description:

1. PUFF PU sheet

- Note:
1. % = percentage by weight
 2. 1% = 10000ppm (mg/kg)
 3. N. D. = Not Detected
 4. Method Detection Limit = 0.002 %

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2) Phthalates

Test Method: With reference to CPSC-CH-C1001-09.3+. Analysis was performed by GC-MS.

Concentration of phthalates in components of child care articles and toy product

Test Item(s)	CAS No.	Unit	Result(s)	Permissible Limit per component
			1	
Dibutyl Phthalate (DBP)	84-74-2	%	N. D.	0.1 %
Benzylbutyl Phthalate (BBP)	85-68-7	%	N. D.	0.1 %
Bis-(2-ethylhexyl) Phthalate (DEHP)	117-81-7	%	N. D.	0.1 %
Di-isononylphthalate (DINP)	28553-12-0 / 68515-48-0	%	N. D.	0.1 %
Di-cyclohexylphthalate (DCHP)	84-61-7	%	N. D.	0.1 %
Di-n-Hexylphthalate (DnHP)	84-75-3	%	N. D.	0.1 %
Diisobutyl phthalate (DIBP)	84-69-5	%	N. D.	0.1 %
Di-n-pentylphthalate (DnPP)	131-18-0	%	N. D.	0.1 %
Conclusion		--	PASS	--

Sample Description:

1. PUFF PU sheet

- Note:
1. N. D. = Not Detected (lower than Detection Limit)
 2. 1 % = percentage by weight
 3. 1 % = 10000 ppm (mg/kg)
 4. Detection Limit for each phthalate = 0.015 %
 5. + = According to 16 CFR 1307 'Prohibition of Children's Toys and Child Care Articles Containing Specified Phthalates'

Picture of Sample as Received :



AYHA19-06915

*** End of Report ***

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