

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

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

SGS File No. : AYHA17-03736
Sample Description : SPU
Style no./Item no. : -
Order No. : -
Buyer : -
Manufacturer : -
Country of Origin : -
Country of Destination : -
Received Date : 2017. 04. 11
Test Period : 2017. 04. 11 to 2017. 04. 14
Test Method : For further details, please refer to following page (s)
Test Results : For further details, please refer to following page (s)
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
Result Summary :

Item	Test Parameter	Conclusion
1	CPSIA section 101(a)(2) – Lead in accessible substrate materials	PASS
2	CPSIA section 108 - Phthalates	PASS

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

SGS Korea Co., Ltd



Jeff Jang / Chemical Lab Mgr

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Component List / List of Materials

Sample No.	Material No.	Component	Material	Color	Remark
/	1	White polymer sheet	Polymer	White	/

Result(s)

1) Lead in accessible substrate materials

Method (non-metallic materials): CPSC Test Method: CPSC-CH-E1002-08.1. Analysis was performed by ICP-OES.

Test Items	MDL	Result(s)	Permissible Limit
		<u>1</u>	
Lead (Pb)	0.002%	ND	0.01 %
Conclusion	-	PASS	-

- Note: (1) N. D. = not detected (< MDL)
 (2) MDL = Method Detection Limit
 (3) % = percentage by weight

2) Phthalates

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

Concentration of phthalates in components of toy that can be placed in the mouth or childcare article

Test item	CAS No.	MDL	Result(s)	Permissible Limit
			<u>1</u>	
Dibutyl Phthalate (DBP)	84-74-2	0.005 %	ND	0.1 %
Benzylbutyl Phthalate (BBP)	85-68-7	0.005 %	ND	0.1 %
Bis-(2-ethylhexyl) Phthalate (DEHP)	117-81-7	0.005 %	ND	0.1 %
Diisononyl Phthalate (DINP)	28553-12-0 / 68515-48-0	0.005 %	0.007	0.1 %
Di-n-octyl Phthalate (DNOP)	117-84-0	0.005 %	ND	0.1 %
Diisodecyl Phthalate (DIDP)	26761-40-0 / 68515-49-1	0.005 %	ND	0.1 %
Conclusion	-	-	PASS	-

- Note: (1) ND = not detected (< MDL)
 (2) MDL = Method Detection Limit
 (3) % = percentage by weight
 (4) 1% = 10000ppm (mg/kg)

Picture of Sample as Received :



*** End of Report ***

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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-CTSAYHA17-03736
SGS File No. AYHA17-03736

Product Description

Heat Transfer Vinyl PU(SPU)

Issued Date

2017. 04. 11

Test Part

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

Manufacturer

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Certification

Test Item	CAS No.	Result(s)
Lead (Pb)	-	ND
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	0.007
Di-n-octyl Phthalate (DNOP)	117-84-0	ND
Diisodecyl Phthalate (DIDP)	26761-40-0 / 68515-49-1	ND
Conclusion		PASS

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