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检测
TESTING
CNAS L1114

TEST REPORT

Client: ThinkFun Inc.
Address: 1321 Cameron St, Alexandria Virginia USA 22314

REPORT NO: C81431728
DATE: July 17, 2017

Attn: Kirsten Bloxom

Sample Description: Gordian's Knot
Quantity Submitted: 6 pieces
Style No.: 6820
PO No.: Not provided
Labeled Age Grading: 8+
Test Age Grading: 8+
Destination: USA, Europe, Canada
Country of Origin: China
Date(s) of samples received: July 10, 2017

TEST METHOD & RESULTS: Please refer to next page(s)

CONCLUSION: Please refer to page two(2)

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CONCLUSION:

ASTM F963-16 Physical & Mechanical Requirements	PASS
16 CFR 1500 Physical & Mechanical Requirements	PASS
Canada Toys Regulations SOR/2011-17 And Regulations Amending Toys Regulations SOR/2016-195 &SOR/2016-302 Physical And Mechanical Requirements	PASS
EN 71-1:2014 Mechanical & Physical Properties	PASS
ASTM F963-16 Flammability Requirements	PASS
16 CFR 1500.3 (c)(6) (vi) / 16 CFR 1500.44 Flammability Requirements	PASS
Canada Toys Regulations SOR/2011-17 And Regulations Amending Toys Regulations SOR/2016-195 &SOR/2016-302 Flammability Requirements (Cellulose Nitrate And Celluloid)	PASS
EN 71-2:2011+A1:2014 Flammability	PASS
Flammability Requirements For Textile Fibres: SOR/2016-194	NOT APPLICABLE [#]
ASTM F963-16 Clause 4.3.5.1 (2) Elements Migration in surface coating	PASS
ASTM F963-16 Clause 4.3.5.2 (2) (b) Elements Migration in substrate	NOT APPLICABLE [#]
Canada Toys Regulations SOR/2011-17 and Regulations Amending Toys Regulations SOR/2016-195 &SOR/2016-302 Heavy Metal Content Requirements	PASS
ASTM F963-16 Clause 4.3.5.1 (1) Total Lead in Surface Coating	PASS
16 CFR 1303 Total Lead Content Requirements	PASS
Consumer Product Safety Improvement Act of 2008 Total Lead Content Requirement [Paint or Surface Coating]	PASS
ASTM F963-16 Clause 4.3.5.2 (2) (a) Total Lead in Substrate	PASS
Consumer Product Safety Improvement Act of 2008 Total Lead Content Requirement [Substrate Materials]	PASS
Total Lead Content Test With Reference to California Proposition 65	PASS
Canada Consumer Products Containing Lead (Contact mouth) regulation	NOT APPLICABLE [#]
ASTM F963-16 Clause 4.3.5.2 (2) (c) Soluble Cadmium in metallic small part	NOT APPLICABLE [#]
Total Cadmium Content and European Reach Regulation Annex XVII	PASS
Consumer Product Safety Improvement Act of 2008 Total Phthalate Requirement	PASS
Total Phthalate and European Reach Regulation Annex XVII	PASS
Phthalates Content With Reference To California Proposition 65 Requirement	PASS
Canada Phthalates regulations SOR 2016-188	PASS
NERC (Formerly Organization: CSG) Model Legislation – Toxics in Packaging Clearinghouse (TPCH), as revised December 1998 & October 2004	PASS
94/62/EC Heavy Metals Requirements on Packaging and Packaging Waste	PASS

#: There is no component on the submitted test samples under the testing scopes.

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For and on behalf of :
UL VS Shanghai Limited Shenzhen Branch

David Mo

Lulu Yang

David Mo
Assistant Manager- Toys Department

Lulu Yang
Senior Technical Officer
Chemical Department

Important Notes :

The results only relate to the samples tested.

The below tests are except from the ILAC-MRA/CNAS accreditation scope:

1. Total Lead Content Test With Reference to California Proposition 65
2. NERC (Formerly Organization: CSG) Model Legislation – Toxics in Packaging Clearinghouse (TPCH), as revised December 1998 & October 2004
3. 94/62/EC Heavy Metals Requirements on Packaging and Packaging Waste
4. Phthalates Content With Reference To California Proposition 65 Requirement
5. Canada Toys Regulations SOR/2011-17 And Regulations Amending Toys Regulations SOR/2016-195 &SOR/2016-302 Physical And Mechanical Requirements
6. Canada Toys Regulations SOR/2011-17 And Regulations Amending Toys Regulations SOR/2016-195 &SOR/2016-302 Flammability Requirements (Cellulose Nitrate And Celluloid)

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1. MECHANICAL AND PHYSICAL TEST

1.1 AS PER ASTM STANDARD CONSUMER SAFETY SPECIFICATION FOR TOYS SAFETY F963-16

The following clauses are identified to be applicable:

Age grading for testing : Ages 8+
Samples Quantity : 2 piece(s) x 1 style

<u>Clause</u>	<u>Test Items</u>	<u>Assessment</u>
4.1	Material(visual check on cleanness)	P
4.7	Accessible Edges	P*
4.9	Accessible Points	P*
5	Safety Labeling Requirements	P
6	Instructional Literature	P
7	Producer's Markings	P

Remark: P=Pass

*: Section 4.7 accessible edges and section 4.9 accessible points are only applicable for toys for children under 96 months, and the assessment was for reference only.

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1.2 AS PER 16 CFR 1500.50, THE HAZARDS OF SHARP POINTS, SHARP EDGE AND SMALL PARTS ARE ASSESSED BOTH BEFORE AND AFTER APPLICABLE USE AND ABUSE TESTS:

The following clauses are identified to be applicable:

Age grading for testing: Ages 8+

Samples Quantity: 2 piece(s) x 1 style

<u>TEST ITEMS</u>	<u>SHARP POINT</u> (1500.48)	<u>SHARP EDGE</u> (1500.49)
As received	P*	P*

Remark: P = Pass

*: The mechanical and physical tests requirements of U.S. consumer products safety commission for toys and articles intended for use by the children specified in U.S. code of federal regulations title 16, part 1500.48 and 1500.49 are only for children under 8 years of age. Only as received sharp point and sharp edge were assessed, and the assessment was for reference only.

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1.3 AS PER CANADA TOYS REGULATIONS SOR/2011-17 AND REGULATIONS AMENDING TOYS REGULATION SOR/2016-195 & SOR/2016-302

The following clauses are identified to be applicable:

Age grading for testing : Ages 8+
Samples Quantity : 2 piece(s) x 1 style

<u>(A)</u>	<u>Test Items</u>	<u>Assessment</u>
9	Ends	P
10	Exposed Plastic Parts	P

Remark: P = Pass

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1.4 AS PER EUROPEAN STANDARDS ON SAFETY OF TOYS EN 71-1:2014

Applicant Specified Age Grading for testing: Ages 8+

Sample size: 2 piece(s) x 1 style

<u>Clause</u>	<u>Test Items</u>	<u>Assessment</u>
4.1	Material cleanliness	P
4.7	Edges	P
4.8	Points and metallic wires	P

Remarks: P=Pass

Address of manufacturer or his authorized representatives or importer should be located in EU community.

Warnings and safety instructions shall be written in the languages easily understood by consumers of the country in which the toy is to be sold. Only English version was reviewed.

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2. FLAMMABILITY TEST

2.1 AS PER ASTM STANDARD ON SAFETY OF TOYS F963-16 ANNEX A5:

Samples Quantity: 2 piece(s) x 1 style
Requirement: Burning rate should not exceed 0.1 inch per second along the major axis.
Results: The sample was tested to be ignited but extinguished.

2.2 AS PER U.S. CODE OF FEDERAL REGULATIONS TITLE 16 PART 1500.44 FOR RIGID AND PLIABLE SOLIDS defined under 16 CFR 1500.3 section (c) (6) (vi):

Samples Quantity: 2 piece(s) x 1 style
Requirement: Burning rate should not exceed 0.1 inch per second along the major axis.
Results: The sample was tested to be ignited but extinguished.

2.3 AS PER CANADA TOYS REGULATIONS SOR/2011-17 AND REGULATIONS AMENDING TOYS REGULATIONS SOR/2016-195 & SOR/2016-302 SECTION 21 (CELLULOSE NITRATE AND CELLULOID)

Requirement: Celluloid (cellulose nitrate) and materials with the same behaviour in fire (except when used in varnish or paint) shall not be used in the manufacture of toys.
Results: The submitted sample(s) complied with this requirement.

2.4 AS PER EUROPEAN STANDARD ON SAFETY OF TOYS EN 71-2:2011+ A1:2014 SECTION 4.1 GENERAL REQUIREMENT (CELLULOSE NITRATE):

Requirement: Celluloid (cellulose nitrate), except when used in varnish, paint or glue, or in balls of the type used for table tennis or similar games, and materials with the same behaviour in fire as celluloid, shall not be used in the manufacture of toys.
Results: The submitted sample(s) complied with this requirement.

Date(s) of test(s) conducted: July 10, 2017 to July 12, 2017

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3. CHEMICAL TESTS:

Key to sample(s):

- Sample 1 = Multicolor coatings (insert sheet)
- Sample 2 = Multicolor coatings (cover& pages of booklet)
- Sample 3 = Transparent plastic (wire-o of booklet)
- Sample 4 = Red plastic (puzzle)
- Sample 5 = Yellow plastic (puzzle)
- Sample 6 = Green plastic (puzzle)
- Sample 7 = Blue plastic (puzzle)
- Sample 8 = Blue-purple plastic (puzzle)
- Sample 9 = Orange plastic (puzzle)
- Sample 10 = White paper card excluding coatings (cover of booklet)
- Sample 11 = White paper sheet excluding coatings (pages of booklet)
- Sample 12 = Transparent plastic (blister)
- Sample 13 = Transparent plastic label (joint of blister)
- Sample 14 = White paper sheet with multicolor coatings (insert sheet)

3.1 SOLUBLE ELEMENT MIGRATION IN SURFACE COATING

Requirement: As per ASTM F963-16 Clause 4.3.5.1 (2) requirement, materials under test shall not exceed below limit.

Test method: Reference to ASTM F963-16 Clause 8.3, used acid extraction and analyzed by Inductively Coupled Argon Plasma Spectrometry.

Results:

Elements	Antimony	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium
Limits	< 60	< 25	< 1000	< 75	< 60	< 90	< 60	< 500
Sample 2	<6.0	<2.5	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0

Remark:

1. All concentrations expressed in milligrams per kilogram
2. "<" means "less than"

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3.2 HEAVY METAL CONTENT TEST: CANADA TOYS REGULATION SOR/2011-17 AND REGULATIONS AMENDING TOYS REGULATIONS SOR/2016-195 & SOR/2016-302

Requirement : Surface coating applied to Toys shall comply with heavy metal requirement as below table.

Results:

Elements	Total Lead	Total Mercury	Soluble Antimony	Soluble Arsenic	Soluble Barium	Soluble Cadmium	Soluble Selenium
Limits	<90	None	< 1000	< 1000	< 1000	< 1000	< 1000
Sample 2	**N/D	**N/D	<50.0	<50.0	<50.0	<50.0	<50.0

All concentrations expressed in milligrams per kilogram
 "<" means "less than"
 "N/D" means "None Detected"
 **Detection Limit is 10.0 milligrams per kilogram.

3.3 TOTAL LEAD CONTENT TEST: COATING

Requirement : As per ASTM F963-16 Clause 4.3.5.1 (1) requirement, lead content in the materials under test shall not exceed of 90ppm.

Test method: CPSC-CH-E1003-09.1 Standard operating procedure for determining Lead (Pb) in paint

Results :

	<u>Sample 2</u>
Total Lead	<10.0

All concentrations expressed in milligrams per kilogram
 "<" means "less than"



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3.4 TOTAL LEAD CONTENT TEST: COATING

Criteria : The submitted samples must meet the Total Lead Limit of 90ppm as stated in 16 CFR 1303

Test method: CPSC-CH-E1003-09.1 Standard operating procedure for determining Lead (Pb) in paint

Results :

Total Lead Sample 2
<10.0

All concentrations expressed in milligrams per kilogram
"<" means "less than"

3.5 TOTAL LEAD CONTENT TEST: COATING

Requirement : The submitted samples must meet the Total Lead Limit of 90ppm as per Consumer Product Safety Improvement Act of 2008

Test method: CPSC-CH-E1003-09.1 Standard operating procedure for determining Lead (Pb) in paint

Results:

Total Lead Sample 2
<10.0

All concentrations expressed in milligrams per kilogram
"<" means "less than"

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3.6 TOTAL LEAD CONTENT TEST: SUBSTRATE

Requirement: As per ASTM F963-16 Clause 4.3.5.2 (2) (a) requirement, lead content in the materials under test shall not exceed of 100ppm.

Test method: CPSC-CH-E1001-8.3 Standard operating procedure for determining total Lead (Pb) in metal;
CPSC-CH-E1002-8.3 Standard operating procedure for determining total Lead (Pb) in non-metal

Results :

	<u>Sample 3</u>	<u>Sample 4/5/6</u>	<u>Sample 7/8/9</u>
Total Lead	<10.0	<10.0	<10.0

All concentrations expressed in milligrams per kilogram
"<" means "less than"

3.7 TOTAL LEAD CONTENT TEST: SUBSTRATE

Requirement: The submitted samples must meet the Total Lead Limit of 100ppm as per Consumer Product Safety Improvement Act of 2008

Test method: CPSC-CH-E1001-8.3 Standard operating procedure for determining total Lead (Pb) in metal children's product (including children's metal jewelry);
CPSC-CH-E1002-8.3 Standard operating procedure for determining total Lead (Pb) in non-metal children's products.

Results:

	<u>Sample 3</u>	<u>Sample 4/5/6</u>	<u>Sample 7/8/9</u>
Total Lead	<10.0	<10.0	<10.0

All concentrations expressed in milligrams per kilogram
"<" means "less than"

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SZ-FAF-001 (2013-04-10)



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检测
TESTING
CNAS L1114

TEST REPORT

Client: ThinkFun Inc.
Address: 1321 Cameron St, Alexandria Virginia USA 22314

REPORT NO: C81431728
DATE: July 17, 2017

TEST RESULTS

3.8 TOTAL LEAD CONTENT TEST: COATING

Requirement : The total lead content shall not be more than 600ppm with reference to California Proposition 65.

Test method: CPSC-CH-E1003-09.1 Standard operating procedure for determining Lead (Pb) in paint

Results:

Total Lead Sample 2
<10.0

All concentrations expressed in milligrams per kilogram
"<" means "less than"

TOTAL LEAD CONTENT TEST: SUBSTRATE

Requirement: The total lead content shall not be more than 600ppm with reference to California Proposition 65.

Test method: CPSC-CH-E1001-8.3 Standard operating procedure for determining total Lead (Pb) in metal children's product (including children's metal jewelry);
CPSC-CH-E1002-8.3 Standard operating procedure for determining total Lead (Pb) in non-metal children's products.

Results:

Total Lead	<u>Sample 3</u> <10.0	<u>Sample 4/5/6</u> <10.0	<u>Sample 7/8/9</u> <10.0	<u>Sample 10/11</u> <10.0
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All concentrations expressed in milligrams per kilogram
"<" means "less than"

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TEST REPORT

Client: ThinkFun Inc.
Address: 1321 Cameron St, Alexandria Virginia USA 22314

REPORT NO: C81431728
DATE: July 17, 2017

TEST RESULTS

3.9 TOTAL CADMIUM CONTENT AND EUROPEAN REACH REGULATION ANNEX XVII: WET-ASHING DIGESTION AND DETECTED WITH AAS/ICP& EN1122:2001 (METHOD B) MICROWAVE DIGESTION AND DETECTED WITH AAS/ICP

Results:

Element	Total Cadmium
Limit	< 100
Sample 1	<5.0
Sample 2	<5.0
Sample 3	<5.0
Sample 4/5/6	<5.0
Sample 7/8/9	<5.0
Sample 12	<5.0
Sample 13	<5.0

All concentrations expressed in milligrams per kilogram
"<" means "less than"

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TEST REPORT

Client: ThinkFun Inc.
Address: 1321 Cameron St, Alexandria Virginia USA 22314

REPORT NO: C81431728
DATE: July 17, 2017

TEST RESULTS

3.10 TOTAL PHTHALATE TEST

Requirement : DEHP, DBP or BBP content shall not be more than 0.1% by weight in toys and childcare article.
DINP, DIDP or DNOP content shall not be more than 0.1% by weight in toys and childcare article which can be placed in the mouth by children.

Test Method : CPSC-CH-C1001-09.3, Standard operating procedure for determination of phthalates.

Results :

Sample ID	Plasticiser Values (w/w)					
	DBP	BBP	DEHP	DNOP	DINP	DIDP
Sample 2	ND	ND	ND	ND	ND	ND

Remarks: 1) Detection Limit for each phthalate = 0.005%
2) ND= not detected

Key : DBP = Di-butyl phthalate DEHP = Di (2-Ethylhexyl) phthalate
BBP = Benzyl butyl phthalate DINP = Di-“isonomy” phthalate
DIDP = Di-“isodecyl” phthalate DNOP = Di -n-octal phthalate

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TEST REPORT

Client: ThinkFun Inc.
Address: 1321 Cameron St, Alexandria Virginia USA 22314

REPORT NO: C81431728
DATE: July 17, 2017

TEST RESULTS

3.11 TOTAL PHTHALATE TEST AND EUROPEAN REACH REGULATION ANNEX XVII

Test Method : EN 14372: 2004

Requirement : DEHP, DBP & BBP content shall not be more than 0.1% by weight in toys and children article.

DINP, DIDP & DNOP content shall not be more than 0.1% by weight in toys and children article that can be placed in the mouth by children.

Results :

Sample ID	Plasticiser Values (w/w)					
	DBP	BBP	DEHP	DNOP	DINP	DIDP
Sample 2	ND	ND	ND	ND	ND	ND
Sample 4/5/6	ND	ND	ND	ND	ND	ND
Sample 7/8/9	ND	ND	ND	ND	ND	ND

Remarks: 1) Detection Limit for each phthalate = 0.005%
2) ND= not detected

Key : DBP = Di-butyl phthalate DEHP = Di (2-Ethylhexyl) phthalate
BBP = Benzyl butyl phthalate DINP = Di-“isonomy” phthalate
DIDP = Di-“isodecyl” phthalate DNOP = Di -n-octal phthalate

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TEST REPORT

Client: ThinkFun Inc.
Address: 1321 Cameron St, Alexandria Virginia USA 22314

REPORT NO: C81431728
DATE: July 17, 2017

TEST RESULTS

3.12 TOTAL PHTHALATE TEST WITH REFERENCE TO CALIFORNIA PROPOSITION 65

Test Method : CPSC-CH-C1001-09.3, Standard operating procedure for determination of phthalates.
Requirement : Each of DEHP, DBP, BBP, DIDP, DnHP & DINP content shall not be more than 0.1% by weight.
Results :

Sample ID	Plasticiser Values (w/w)					
	DBP	BBP	DEHP	DnHP	DINP	DIDP
Sample 2	ND	ND	ND	ND	ND	ND
Sample 3	ND	ND	ND	ND	ND	ND
Sample 4/5/6	ND	ND	ND	ND	ND	ND
Sample 7/8/9	ND	ND	ND	ND	ND	ND

Remarks: 1) Detection Limit for each phthalate = 0.005%
2) ND= not detected

Key : DBP = Di-butyl phthalate DEHP = Di (2-Ethylhexyl) Phthalate
BBP = Benzyl butyl Phthalate DNHP = Di-n-hexyl phthalate
DIDP = Di-“isodecyl” phthalate DINP = Di-iso-nonyl phthalate

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TEST REPORT

Client: ThinkFun Inc.
Address: 1321 Cameron St, Alexandria Virginia USA 22314

REPORT NO: C81431728
DATE: July 17, 2017

TEST RESULTS

3.13 TOTAL PHTHALATE TEST: CANADA PHTHALATES REGULATION SOR 2016-188

Method : Reference to Canada Product safety reference manual, Book 5, Part B, Method C-34, Determination of phthalates in polyvinyl chloride and following by Gas Chromatography-Mass Spectrometry (GC-MS) analysis.
Results :

Sample ID	Plasticiser Values (w/w)					
	DBP	BBP	DEHP	DNOP	DINP	DIDP
Sample 2	ND	ND	ND	ND	ND	ND

Remarks: 1) Detection Limit for each phthalate = 0.005%
2) ND= not detected

Key : DBP = Dibutyl Phthalate DEHP = Di (2-Ethylhexyl) Phthalate
BBP = Benzyl butyl Phthalate DINP = Di-“isononyl” phthalate
DIDP = Di-“isodecyl” phthalate DNOP = Di -n-octyl phthalate

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TEST REPORT

Client: ThinkFun Inc.
Address: 1321 Cameron St, Alexandria Virginia USA 22314

REPORT NO: C81431728
DATE: July 17, 2017

TEST RESULTS

3.14 NERC (FORMERLY ORGANIZATION: CSG) MODEL LEGISLATION – TOXICS IN PACKAGING CLEARINGHOUSE (TPCH), AS REVISED DECEMBER 1998 & OCTOBER 2004 AND MICROWAVE DIGESTION AND DETECTED WITH AAS/ICP AND WET-ASHING DIGESTION AND DETECTED WITH AAS/ICP

Results:

Elements	Total Cadmium	Hexavalent Chromium	Total Lead	Total Mercury	Pb + Cd + Hg + Cr(VI)
Limits					< 100
Sample 12	<5.0	<10.0	<10.0	<5.0	<30.0
Sample 13	<5.0	<10.0	<10.0	<5.0	<30.0
Sample 14	<5.0	<10.0	<10.0	<5.0	<30.0

All concentrations expressed in milligrams per kilogram
"<" means "less than"

3.15 HEAVY METALS REQUIREMENTS ON PACKAGING AND PACKAGING WASTE: 94/62/EC & MICROWAVE DIGESTION AND DETECTED WITH AAS/ICP AND WET-ASHING DIGESTION AND DETECTED WITH AAS/ICP

Results:

Elements	Total Cadmium	Hexavalent Chromium	Total Lead	Total Mercury	Pb + Cd + Hg + Cr(VI)
Limits					< 100
Sample 12	<5.0	<10.0	<10.0	<5.0	<30.0
Sample 13	<5.0	<10.0	<10.0	<5.0	<30.0
Sample 14	<5.0	<10.0	<10.0	<5.0	<30.0

All concentrations expressed in milligrams per kilogram
"<" means "less than"

Date(s) of test(s) conducted: July 10, 2017 to July 12, 2017

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TEST REPORT

Client: ThinkFun Inc.
Address: 1321 Cameron St, Alexandria Virginia USA 22314

REPORT NO: C81431728
DATE: July 17, 2017

Product Photo:



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SZ-FAF-001 (2013-04-10)

APPENDIX 1 - TERMS AND CONDITIONS OF SERVICE / 附件一：服务所依据的条款和条件

UL VS Shanghai Limited - Shenzhen Branch ("UL VS") undertakes to provide services to its Customer subject to the terms and conditions contained herein.
优力胜邦质量检测（上海）有限公司深圳分公司（“乙方”）承诺根据以下所列的条款向客户（“甲方”）提供服务。

The term of limitation of liability contained herein has been conspicuously marked to draw the attention of the Customer, the full and complete explanation of the wording and legal significance of this term has been made to the Customer by UL VS. The Customer agrees that this term shall be construed as a provision of the agreement between UL VS and itself, based on the full and complete understanding of the wording and legal significance of this term.
乙方对本附件第四条已经做出了明显的标识以提示甲方注意，并且对该条的文字表述和法律意义，向甲方做出了充分和完整的解释。甲方已经仔细阅读了本附件第四条，对其文字表述和法律意义已经充分和完整地理解，在此基础上甲方表示同意该条款当然成为甲乙双方之间的一项约定。

COMPUTATION OF CHARGES AND PAYMENT

第一条 费用计算和付款

- 1.1 (a) Consultation time shall be charged on a daily basis.
(b) 咨询时间应当以日为基础计费。
(c) Where the personnel of UL VS are assigned by its Customer to any in-house projects, the Customer shall be billed on an hourly basis on the compensation rates of its personnel.
当乙方的人员被甲方指派至任何内部项目，甲方应当以小时为基础按此等人员的报酬费率进行计费。
- 1.2 Disbursements incurred on the Customer's behalf such as expenditure for communications, transportation, travel, the purchase of any materials, tools, equipment, components or parts which are directly related to the service shall be billed at costs and shall include a reasonable handling charge at the discretion of UL VS.
为甲方而产生的开支与服务直接相关的通讯、交通、差旅、购买任何原材料、工具、设备、零件或部件的费用，应当按成本向甲方计费，且应包含一笔由乙方决定的合理手续费。
- 1.3 Where in the opinion of UL VS the services are time consuming entailing the use of special equipment and disbursements, the Customer shall be charged on an "equipment-hour" basis on the spot.
当乙方判断服务将消耗大量时间，导致使用特殊设备或支出时，对甲方将以所花费的“设备-小时”为基础收取费用。
- 1.4 Payments shall be paid in RMB at its address or at such other address and in such manner as UL VS may from time to time specify. Payment made by post shall be at the risk of the Customer.
付款应当在乙方所在地人民币方式支付，或者根据乙方可以随时规定的其他地方或其他支付方式。以邮寄方式做出的付款应当由甲方承担风险。
- 1.5 The Customer undertakes during the continuance of this Agreement -
(a) 甲方承诺在本协议存续期间：-
(a) to punctually pay all billings rendered to the customer from time to time;
准时支付不时提供给甲方的所有帐单；
(b) unless otherwise agreed in writing, payment is to be made within 7 days from the date of Invoice or the date of the Debit Note;
除非另有书面约定，付款应当在开票或借记单日期之日起的 7 天内作出；
(c) where the Customer fails to pay within time, UL VS shall charge interest on overdue invoices at the rate of 2% per month or 24% per annum until payment, such interest to run from day to day and to accrue after as well as before any judgment and is to be compounded at monthly intervals;
若甲方未能按时付款，乙方就逾期未开发票金额以每月 2% 或每年 24% 的比例收取罚息，直至全额付款。此等罚息以日计算且在任何判决之前和之后都产生，并以月为间隔，按本金和不断累积的利息为基数来计息；
(d) UL VS shall have a lien on any goods of the Customer until payment but the exercise of such lien shall not prevent interest continuing.
乙方有留置甲方的货物直至其全额付款，但留置权的行使不应妨碍利息的继续计算。
- 1.6 If the Customer shall fail to pay UL VS for any reason under Clause 1.5 or if the Customer shall commit a breach of any of its obligation under this Agreement or if a receiver of the Customer is appointed or if any resolution or petition to wind up the Customer's business shall be passed or presented (except for the purpose of reconstruction), UL VS may without prejudice to its other rights either suspend or cancel the Agreement and in such an event UL VS may also suspend or cancel any other existing contracts without being liable to damages.
若甲方因任何原因未能根据第 1.5 条向乙方付款，或若甲方违反了本协议项下的任何义务，或若甲方的接管人一旦被任命，或结束甲方业务的任务决议或申请被通过或提交（为重组之目的除外），则乙方可以在不影响其权利情况下中止或解除本协议，在此等情况下乙方也可以中止或撤销任何其他在合同并且不对损失负责。

CONFIDENTIAL TREATMENT OF INFORMATION

第二条 信息的保密处理

- 2.1 Unless otherwise specifically agreed between the parties, the services rendered by UL VS to the Customer shall be on a non-exclusive best-efforts basis.
除非双方另有特别约定，由乙方为甲方提供的服务应当是在不排他的和勤勉尽责的基础上。
- 2.2 Information explicitly agreed by UL VS and the Customer, shall be kept confidential (whether contained in models, drawings, reproductions of drawings, written reports, letters, memoranda or notes or in any other form) shall be kept strictly confidential by UL VS for the purposes of this Agreement and UL VS shall at all times use all reasonable efforts to prevent the disclosure to third parties of any part thereof unless UL VS shall have first obtained the written consent of the Customer specifically authorizing such disclosure PROVIDED ALWAYS AND IT IS MUTUALLY AGREED that the confidentiality shall extend for a period of five (5) years from the date of completion of its work and PROVIDED FURTHER that UL VS shall not be liable under this clause if through no fault of UL VS the information is generally known to the public; or the information is generally known to UL VS; or is independently developed by UL VS without recourse to the materials provided by the Customer; or the information is necessary for production by UL VS under this Agreement; or is disclosed in accordance with a judgment or writ issued by a competent court of any jurisdiction to which the Terms are subject, or with an order, notice or requirement issued by a governmental agency of the aforesaid jurisdiction.
乙方和甲方明确约定的，包括但不限于模型、图纸、图纸的复制品、书面报告、信件、备忘录或笔记中以任何形式获得，都应当由乙方为本协议之目的而严格保密。乙方应当始终采取一切合理的努力以防止此等技术信息的任何部分向第三方泄露，除非乙方已经获得甲方特别授权此等信息的书面同意。双方约定此等保密期限在工作完成之日起延续 5 年，且乙方在下列情况下根据本协议不承担责任：在乙方无过错的情况下，该信息被公众普遍知悉；或该信息被乙方普遍知悉；或该信息由乙方独立开发，没有利用甲方所提供的材料；或该信息由乙方根据本协议履行义务所必需；或该信息在根据本协议规定的有管辖权的法院出具的判决或正式文书或根据主管有权管辖的政府机构发布的情况下。乙方应当始终必须提供。
2.3 UL VS undertakes that the identity of its Customers and the nature of services rendered shall be kept confidential unless the Customer agrees in writing to their release. Provided Always that UL VS shall not be liable under this clause if through no fault act or failure on its part the identity of the Customer is generally known to the public.
乙方承诺对其甲方的身份和所提供服务的性质保密，除非甲方书面同意揭露。但若在乙方方面没有过错行为或失误的情况下，甲方的身份被公众普遍知悉，乙方不承担责任。

PATENT RIGHTS

第三条 专利权

- 3.1 Any invention made in the performance of work for the Customer by UL VS within the field of work undertaken for the Customer, belongs to the Customer.
在为甲方履行工作的过程中，在为甲方承担的工作范围内由乙方作出的任何发明均属于甲方。
- 3.2 UL VS's of the aforesaid inventions shall be free of any royalty fees provided that the uses of such inventions are confined to the performance of the work for the Customer.
在为甲方履行工作的过程中使用上述发明，乙方应当免收专利使用费。

LIMITATION OF LIABILITY

第四条 责任限制

- 4.1 If any liability on the part of UL VS shall arise (whether under the express or implied terms hereof or under the relevant Chinese laws and regulations) in contract, tort or infringement, the Customer's right to recover damages for any loss of whatever nature caused by the fault or negligence of UL VS or by any breach of its obligations or howsoever caused shall be limited to the payment by UL VS of the amount of the contract price under this Agreement and the said limitation of liability shall apply regardless of the form of action, whether in contract, tort, infringement or otherwise. In no event shall UL VS be liable for incidental or consequential damage. The Customer hereby acknowledges and states that its losses and damages, whether direct or indirect, resulted therefrom will be sufficiently recovered by the above amount of compensation and shall not raise any further claim against UL VS beyond such amount.
若在乙方方面产生任何合同或侵权责任，无论根据本协议明示或暗示条款，或根据相关中国法律法规，甲方要求赔偿乙方违约或过失或违反其任何义务或其他原因造成的损失无论何种形式的任何损失的权利，应当被限于根据本协议项下甲方支付给乙方的合同价格的数额，且无论诉讼的形式为合同、侵权或其他违约，上述责任限制都应当适用。而在乙方在任何情况下都无需为附带或因此而起造成的损失承担责任。甲方在此承认并声明其因此而产生的损失和损害，无论直接或间接，都将由上述赔偿款项以充分弥补，且在此款项之外不应由乙方提出任何进一步的请求。

INDEMNITY

第五条 补偿

- 5.1 In the event of actual or threatened suit against UL VS in relation to the services undertaken on behalf of the Customer or in relation to any of the Products or Patent of the Customer or of any allegation of infringement of any letters patent, registered design, trade mark or trade name, the Customer shall indemnify UL VS harmless from any liability, action, claim, demand, costs, charges and expenses arising therefrom or from or expense including solicitors fees, counsel's fees in defending such action. Provided Always that the Customer will at its own election either accept or settlement or compromise or at its own expense defend any such action or proceeding and the Customer shall pay the costs of any settlement or compromise effected.
若有与乙方代表甲方所承担的服务相关，或甲方的任何产品或商标或专利相关针对乙方的任何实际的或可能的诉讼，或若有对任何专利证书、注册设计、商标或商号的侵权声明，甲方应当赔偿乙方，以使其免受任何因此而产生的责任、诉讼、索赔请求、催告、开支、收费和费用或抗辩等任何行为而发生的费用，包括律师费、顾问费，但若甲方自行决定采取任何和解或妥协行动，或自费费用抗辩任何行为或程序，则甲方应当支付采取任何和解或妥协行动的费用。

SOLICITATION OF EMPLOYEES

第六条 雇员引诱

- 6.1 It is mutually agreed that neither party shall solicit the employees of the other for employment or hire unless prior written consent to do so is obtained.
双方同意除非得到事先书面同意，任何一方均不得引诱雇佣或聘用另一方的雇员。

EFFECT OF PROPOSAL

第七条 建议书的效力

- 7.1 The accompanying proposal is valid for a period of ninety (90) days from the date of the proposal unless extended in writing by UL VS. Upon the acceptance of such proposal, this appendix shall form part of the Agreement with the Customer and notwithstanding any prior discussions or prior oral or written agreements to the contrary, the terms and conditions herein shall be applicable and take precedence over any conflicting terms contained in any documents submitted by the Customer.
本附件之建议书，除非由乙方书面延展，其有效期为建议书出具之日起九十（90）日。一旦被接受此建议书，本附件应当构成与甲方协议的一部分，且无论之前是否有与之相关的任何讨论或口头或书面协议，本文中的条款和条件应当适用于、且取代甲方提交的任何文件中所包含的任何与之相冲突的条款。

DATA AND DOCUMENT RETENTION

第八条 数据和文件保留

- 8.1 (a) After the services are rendered, UL VS may retain a copy of all documents relating to the services (the "Supporting Documents") for as long as UL VS, in its sole discretion, deems fit.
在提供服务后，乙方有权在认为适当时保留一份与其服务相关的所有文件（“支持文件”）的复印件。
(b) Unless otherwise specified or required by the applicable law, all Supporting Documents over 3 years of age will be automatically destroyed by UL VS without notice to the Customers. Should any or all Supporting Documents less than 3 years are scheduled to be destroyed, UL VS shall give the Customer 30 Days' written notice to the Customer's last known address of its intention to destroy the Supporting Documents. Unless the Customer makes a written request to UL VS reaching UL VS before the expiration of the said 30 days seeking delivery of those documents to the Customer at the Customer's expense, those documents shall be destroyed.
除非另有说明或法规所限，所有超过 3 年的支持文件将由乙方自动销毁，通知甲方。若任何少于三年的支持文件将被销毁，乙方应当按最后被其知悉的甲方地址给予甲方一份 30 日期限的书面通知，告知其销毁该文件的意图。除非甲方方向乙方提出书面请求，要求将此等文件交付给甲方，并且该请求在上述 30 日期限前送达乙方并由甲方承担费用，否则此等文件将被销毁。
(c) The Customer shall indemnify UL VS for any costs or expenses in responding to or opposing any subpoena, the production of any documents in Court seeking the disclosure of the said documents or any information contained therein.
甲方应当赔偿乙方为回应或对抗任何寻求揭示上述文件或其中包含的任何信息的传票以及在法庭上制作文件的任何费用或支出。

GOVERNING LAW

第九条 适用法律

- 9.1 This Agreement and the rights and obligations of the parties shall in all respects be governed, construed, interpreted and operated in accordance with the relevant Chinese laws and regulations.
本协议和双方的权利义务在各方面都应当由相关的中国法律法规管辖、推解、解释和履行。

OBLIGATIONS OF THE CUSTOMER

第十条 甲方的义务

- 10.1 If the Customer intends to change the work hereunder or assign any other work to UL VS, such a change or new assignment shall be subject to a separate negotiation and agreement between both of the parties. If UL VS suffers any loss or damage because the Customer changes the contractual work undertaken by UL VS as agreed by both parties prior to completion of the work, the Customer shall compensate for such losses and damages.
若甲方要求变更本协议项下的工作或向乙方交付任何其他工作，此等变更或重新交付的工作应当由双方另行磋商和约定。若由于甲方在工作完成之前变更双方约定由乙方承担的工作，而导致乙方遭受了任何损失或损害，甲方应当赔偿此等损失和损害。
10.2 If the work undertaken by UL VS hereunder requires any assistance of the Customer, the Customer shall be obliged to provide all necessary and reasonable assistance which UL VS may deem fit. If the work undertaken by UL VS hereunder cannot be completed due to the Customer's failure to perform its obligation to assist, UL VS may demand the Customer performs its obligation within a reasonable period of time and may appropriately extend the time limit for its own work. If upon the expiration of such reasonable time period the Customer still fails to perform its obligation, UL VS may terminate this Agreement, without prejudice to any other rights of UL VS hereunder or under any applicable laws and regulations.
若本协议项下乙方所承担的工作需要甲方的协助，甲方有义务提供乙方视为合适的所有必需和合理的协助。若由于甲方未能履行其协助义务而使本协议中乙方所承担的工作无法完成，乙方可以在合理期限内催告甲方履行义务，且可以适当地延展其工作的期限。若在上述合理期限期满后甲方仍然未能履行其义务，乙方可以终止本协议，且不影响根据本协议或任何可适用的法律法规所拥有的任何其他权利。

SAMPLES

第十一条 样品

- 11.1 UL VS expects Customers to abide by all applicable regulations when shipping samples to UL VS. Improper shipping may result in additional charges for costs incurred by UL VS: (a) to identify samples to UL VS, (b) damage done to UL VS personnel or property as a result of improper packaging, labeling or omission of identifying documents. UL VS has the right to refuse receipt of any shipment that, in its discretion, is unsafe or has been shipped improperly. Any costs associated by refusal to accept shipment under this clause are the sole responsibility of the Customer. Customer shall indemnify and hold harmless UL VS for any and all damages, expenses, fines, judgments, liabilities and costs (including attorney's fee) incurred by UL VS and arising from the improper packaging or shipment of the sample by Customer.
乙方期望甲方能够遵循所有适用的法规把样品寄送给乙方。不正确的寄递方式可能会导致成本增加。乙方将收取附加费用：(a) 鉴定样品成分；(b) 由于不正确的包装、标识或者识别文件的遗漏导致乙方人员或财产损失。乙方拥有拒绝接收或接收的判断为不安全或以不正确方式寄送的样品的权利。在这条款下，由于乙方拒绝接收而产生的一切费用将由甲方单独承担。乙方将要求甲方赔偿由于甲方不正确的包装和寄递方式所导致的部分以及全部的损害、开支、罚款、裁定、债务以及其他费用（包括律师费用）。

E-MAIL DISCLAIMER

第十二条 电子邮件免责声明

- 12.1 UL VS shall follow the request of the Customer in the event that final report / results hereunder shall be sent by e-mail rather than by paper hard copy. UL VS considers e-mail a valuable and efficient tool, however, UL VS hereby gives cautions to the Customer that the report / results in electronic version may inadvertently be modified once it is in the Customer's word processing system. Further, the current e-mail transmission technology may allow for interception of messages and reports / results by third parties. UL VS shall not be held responsible for these risks, which are out of its control. Should a report / results be sent to the Customer by e-mail on its request, such a request SHALL BE DEEMED TO BE AN ACCEPTANCE OF THE RISK THAT THE REPORT / RESULTS MAY BE INTERCEPTED BY THIRD PARTIES. The Customer shall agree that the report / results shall be sent by UL VS unencrypted. Transmission of report / results (or other materials requested by the Customer) via the internet or other public network shall not be considered to constitute a breach of any confidentiality or other provisions of this Agreement between UL VS and the Customer, and UL VS shall in no way be liable for any damages resulting from such a transmission. Additionally, UL VS shall not be liable for any damages incurred by the Customer for any changes made to the report / results after it has been transmitted.
若甲方要求将本协议项下最终报告/结果以电子邮件而非以纸质文件的形式寄发时，乙方应遵循甲方的此等要求。乙方视电子邮件为有用且有效的工具，然而，乙方在此警告甲方，一旦电子版报告/结果进入甲方的文件处理系统，其有可能被非故意地修改。此外，现有的电子邮件传递技术有可能使得第三方对信息/报告/结果进行拦截。乙方不对此等超越乙方控制范围的风险负有责任。如果一份报告/结果在甲方的请求下需以电子邮件的方式寄发，那么此等请求同时被视为接受第三方可能拦截这份报告/结果的风险。甲方同意乙方以不加密的方式寄发报告/结果。通过互联网或其它公共网络传递报告/结果/甲方要求的数据材料，不应被视为构成违反乙方和甲方之间的协议中规定的任何保密或其它条款，并且乙方不以任何方式对此等传递而产生的任何损失负责。此外，乙方不对任何在报告/结果被传递后对其的任何修改使甲方招致的任何损失负责。

MISCELLANEOUS PROVISIONS

第十三条 其他规定

- 13.1 Any provision of this Agreement prohibited by or regarded as unlawful or unenforceable under any applicable law actually applied by any court of competent jurisdiction shall, to the extent required by such law, be severed by this Agreement and rendered ineffective so far as is possible without modifying the remaining provisions of the agreement. Where however the provisions of any such applicable law may be waived, they are hereby waived by the parties hereto to the full extent permitted by such law to the end that this Agreement shall be valid and binding agreement enforceable in accordance with its terms.
根据有管辖权的法院所适用的法律，本协议中的任何条款被禁止或被认为无效或不可执行时，则应当在此等适用法律所要求的范围内尽可能地使本协议其他条款的效力。但若有任何此等适用法律之规定可以被放弃或不适用于，则双方在此等适用法律所允许的范围内尽可能地放弃此等规定，以使本协议成为有效的、有约束力的完整协议。
13.2 A certificate signed by any officer of UL VS as to the amount due from the Customer hereunder at the date of such certificate shall, in the absence of manifest error, be conclusive evidence of the amount due.
一份由乙方的任何管理人员签署的就根据本协议甲方在该等证书之日应付款项的证书，若无明显错误，应作为此等应付款项的确定。
13.3 Nothing in this Agreement shall be considered to form a partnership between the parties. No party shall represent that it acts as agent for another or has any capacity to bind another in any contractual or other arrangements.
本协议中任何条款均不得被视为在甲乙双方之间形成任何合伙关系。任何一方均不得将其可作为另一方的代理人或有能力在任任何合同或其他安排中约束另一方。
13.4 Save as herein otherwise provided any notice required to be given hereunder shall be sufficiently given if given in writing or by telegram or telex to the last known postal address or telex number of the addresses and every notice shall be deemed to have been received and given at the time when in the course of transmission it should have been delivered at the address or telex number to which it was sent.
除非另有规定，根据本协议需要作出的任何通知，若以书面形式或通过电话或电报向最后所知的地址或该地址的传电号码发出，应被视为充分发出。且在传电过程中，当其应当被传送到所指定的地址或传电号码时，应当被视为已经被收到和作出。
13.5 The report or certificate does not relieve sellers/suppliers from their contractual responsibility with regards to the quality/quantity of this delivery nor does it prejudice Customer's right to claim towards sellers/suppliers for compensation for any apparent and/or hidden defects not detected during UL VS's random inspection or testing or audit.
本报告或证书并未免除卖方/供应商关于交付货物质量/数量方面的合同责任，也不影响甲方方向卖方/供应主张赔偿在乙方随机检查或测试或审核中未被发现的任何表面和/或隐藏的瑕疵的权利。