

 Technical Report:
 96223160080
 NOVEMBER 29, 2022

 Date Received:
 NOVEMBER 12, 2022
 Page 1 of 14

ZHIAO VIET NAM COMPANY LIMITED

PLOT NO. 713, MAP SHEET NO. 45, GROUP 5, KHANH TAN QUARTER, KHANH BINH WARD, TAN UYEN TOWN, BINH DUONG PROVINCE, VIETNAM (POSTT CODE: 75412)

Sample Description: LOFT BED Vendor: ZHIAO VIET NAM Sample Size: 01 PC COMPANY LIMITED VPN: Manufacturer: ZHIAO Buyer: **GIGACLOUD** SKN/SKU No.: MF298235AAB & TECHNOLOGY(USA) INC MF298236AAB Agent: Labeled Age Grade: PO No.: Appropriate Age Grade: Ref #: Client Specified Age Grade: Country of Origin: **VIETNAM** Tested Age Grade: Assortment No.: UPC Code: Department No.: Phase of Production: **PRODUCTION** Item#: Color: **BLACK** Date of Production: Program: Model/Style#: 2203-US-LE-168 Previous No: N/A Country of Destination: USA

TEST PROPERTY	PASS	FAIL	DATA	N/A	Remark
CPSIA Total lead content in Surface Coating	Х				
CPSIA Total Lead Content In Substrate Materials	Х				
16 CFR 1213 Bunk Beds	Х				
16 CFR 1513 Requirements for Bunk Beds	Х				
ASTM F1427-21e1 Bunk Beds (Metal)	Х				
ASTM F1148-21	Х				
16 CFR 1500.48; 16 CFR 1500.49 (Modify), Sharp points and edges	х				



ZHIAO VIET NAM COMPANY LIMITED Technical Report: **96223160080** NOVEMBER 29, 2022 Page 2 of 14

Note(s):

- This report includes the test result(s) which was conducted & reviewed by Analytical department.

If there is any question regarding this report, please contact the following lab personnel:

Administrative inquiries, please contact:

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BUREAU VERITAS CONSUMER PRODUCTS SERVICES (VN) LTD.

TERRY NGUYEN

AUTHORIZED REPORT APPROVER - HARDLINE, TOYS & JUVENILE PRODUCTS DIVISION



ZHIAO VIET NAM COMPANY LIMITED Technical Report: **96223160080** NOVEMBER 29, 2022 Page 3 of 14

SAMPLE DESCRIPTION ASSIGNED BY LABORATORY

Test Item(s)	Sample description/ Location	Material	Style(s)
1001	Black Coating/ Metal Frame	Coating	-
1002	Black Coating With Paper Veneer	Coating	-
1003	Brown Coating With Paper Veneer	Coating	-
1004	No Coating/ Hardware	-	-
1005	No Coating/ Tracking Label	-	-
1006	Particleboard	Wood	-
1007	Metal Frame	Metal	-
1008	Screw	Metal	-
1009	Bolt	Metal	-
I010	No Coating/ Warning Label	-	-
I011	Orange/ Black/ White Coating/ Warning Label Of Slide	Coating	-
1012	Yellow/ Red Coating/ Maximum Weight Label	Coating	-

TEST RESULT

Total Lead Content in Surface Coating:

- United States Consumer Product Safety Improvement Act (CPSIA) of 2008, Section 101(a)(2) / United States Code of Federal Regulations (CFR), Title 16, Part 1303

Test Method : U. S. CPSC-CH-E1003-09.1 (February 25, 2011).

Maximum Allowable Limit :	90 mg/kg
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-	Unit	Result				
Test Item(s)	-	1001	1002	1003	1004	1005
Parameter	-	-	-	-	-	-
Total Lead (Pb)	mg/kg	ND	ND	ND	-	-
Conclusion	-	PASS	PASS	PASS	NA	NA

-	Unit		Result	
Test Item(s)	-	I010	I011	l012
Parameter	-	-	-	-
Total Lead (Pb)	mg/kg	-	ND	ND
Conclusion	-	NA	PASS	PASS

Note / Key:

ND = Not detected NA = Not applicable mg/kg = milligram(s) per kilogram = ppm = part(s) per million

">" = Greater than

Detection Limit (mg/kg): 10

Remark:

- Component(s) in Test Item(s) may not able to be tested individually due to overlapping.



ZHIAO VIET NAM COMPANY LIMITED Technical Report: **96223160080** NOVEMBER 29, 2022 Page 4 of 14

TEST RESULT

Total Lead Content in Substrate: - United States Consumer Product Safety Improvement Act (CPSIA) Section 101(a)(2)

Test Method

: U. S. CPSC Test Method CPSC-CH-E1001-08.3 (November 15, 2012) or U. S. CPSC Test Method CPSC-CH-E1002-08.3 (November 15, 2012).

Maximum Allowable Limit :	100 mg/kg
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-	Unit	Result			
Test Item(s)	-	1006	1007	1008	1009
Parameter	-	-	-	-	-
Total Lead (Pb)	mg/kg	ND	ND	ND	ND
Conclusion	-	PASS	PASS	PASS	PASS

Note / Key:

ND = Not detected NA = Not applicable ">" = Greater than

mg/kg = milligram(s) per kilogram = ppm = part(s) per million 10000 mg/kg = 1 % % = percent

Detection Limit (mg/kg): 10

Remark:

- According to Children's Products Containing Lead; Exemptions for Certain Electronic Devices; Final Rule, exemption were granted to steel alloy containing up to 0.35 % lead by weight, aluminum containing up to 0.4 % lead by weight and copper-based alloy containing up to 4 % lead by weight.
- According to Petition Requesting Exception from Lead Content Limits; Notice Granting Exception, exemption was granted to certain aluminum alloy on certain ride-on children's products containing up to 0.03 % lead weight.



ZHIAO VIET NAM COMPANY LIMITED Technical Report: **96223160080** NOVEMBER 29, 2022 Page 5 of 14

REQUIREMENTS FOR BUNK BEDS (FHSA, Title 16, CFR, Part 1213 & 1513)

Section	Description	Results
1213.3 1513.3	Requirements	
1213.3(a) 1513.3(a)	Guardrails	
1213.3(a)(1) 1513.3(a)(1)	Two guardrails required if bed is > 30 inches from ground	М
1213.3(a)(2) 1513.3(a)(2)	One guardrail shall be continuous	М
1213.3(a)(3) 1513.3(a)(3)	No greater than 15 inches between either end	М
1213.3(a)(4) 1513.3(a)(4)	Bunk Beds with ladder, continuous guardrail on other side	М
1213.3(a)(5) 1513.3(a)(5)	Guardrails attached so they cannot be removed without releasing a device	М
1213.3(a)(6) 1513.3(a)(6)	The upper edge shall be no less than 5 inches above top surface	М
1213.3(a)(7) 1513.3(a)(7)	No openings in the structure between lower edge and underside	М
1213.3(b) 1513.3(b)	Bed End Structures	
1213.3(b)(1) 1513.3(b)(1)	The upper edge of end structure shall be at least 5 inches above mattress	М
1213.3(b)(2) 1513.3(b)(2)	No openings in the structure above foundation of the upper bunk that permits passage of the wedge block	М
1213.3(b)(3) 1513.3(b)(3)	Tested in accordance with Section 1213.4(c)	М
1213.3(b)(4) 1513.3(b)(4)	Neck entrapment requirements of Section 1213.4(c)(3)	М
1213.5 1513.5	Marking and Labeling	
1213.5(a) 1513.5(a)	Permanent label with name and address, model # and date code	М
1213.5(b) 1513.5(b)	Permanent Warning Label placement	М
1213.6 1513.6	Instructions	
1213.6(a) 1513.6(a)	Size of mattress and foundation	М
1213.6(b) 1513.6(b)	Safety Warning	-
1213.6(b)(1) 1513.6(b)(1)	Do not allow children under 6 years of age to use the upper bunk	М
1213.6(b)(2) 1513.6(b)(2)	Use guardrails on both sides of the upper bunk	М



ZHIAO VIET NAM COMPANY LIMITED Technical Report: **96223160080** NOVEMBER 29, 2022 Page 6 of 14

REQUIREMENTS FOR BUNK BEDS (FHSA, Title 16, CFR, Part 1213 & 1513)

Section	Description	Results
1213.6(b)(3) 1513.6(b)(3)	Prohibit horseplay on or under beds	М
1213.6(b)(4) 1513.6(b)(4)	Prohibit more than one person on upper bunk	М
1213.6(b)(5) 1513.6(b)(5)	Use ladder for entering or leaving upper bunk	М
1213.6(b)(6) 1513.6(b)(6)	If the bed is placed against a wall, use full length guardrail along wall	М

M = Meet NM = Not Meet NA = Not Applicable R = Refer to Comment Section



ZHIAO VIET NAM COMPANY LIMITED Technical Report: **96223160080** NOVEMBER 29, 2022 Page 7 of 14

STANDARD CONSUMER SAFETY SPECIFICATION FOR BUNK BEDS (ASTM F1427-21e1)

	NDARD CONSUMER SAFETY SPECIFICATION FOR BUNK BEDS (ASTM F1427-21e1)				
Section	Requirement	Result			
4	Performance Requirements				
4.1	Vertical Protrusions	-			
4.1.1	Vertical protrusions along the top inside surface	М			
4.1.2	Cap used along the top surface of upper bunk	NA			
4.2	Fit of Top Bed to Bottom Bed	NA			
4.3	Mattress and Foundation Size and Fit (Top Bed)	M			
4.4	Mattress Size and Fit (Lower Foundation)	M			
4.5	Upper and Lower Foundation Support Systems	-			
4.5.1	Horizontal position of the mattress and the foundation	M			
4.5.2	Utilized event cross-members	М			
4.5.3	Release of positive fastening devices or use of hand tools	М			
4.5.4	Static load for the foundation support system	M			
4.6	Side Rails	-			
4.6.1	Bolt-On Side Rails	NM			
4.6.2	Hook-On Side Rails	NA			
4.6.3	Side rail attachments	M			
4.7	Guardrails	-			
4.7.1	Presence of guardrails	M			
4.7.2	Requirement of attachment	М			
4.7.3	Requirement of height of the upper edge above the sleeping surface	M			
4.7.4	Opening of the guardrail	M			
4.7.5	Opening between the either end of the guardrail and the bed end structure	M			
4.8	Bed Structure	-			
4.8.1	The upper edge of the upper bunk end structures	M			
4.8.2	Openings in the rigid end structures of the upper bunk	M			
4.8.3	Openings in the end structures of the lower bunk	M			
4.8.4	Neck entrapment requirement of all portions of the boundary of any opening of the lower bunk end structure	М			
4.9	Ladders	-			
4.9.1	Presence of ladder	М			
4.9.2	Dimension requirement of ladder	M			
4.9.3	Openings between ladder step and upper bunk boundary	М			
4.9.4	Gaps between edge of mattress and interior vertical stile	М			
4.10	Metal beds: frame and fastenings	М			
6	Marking and Labeling	М			
7	Instructional Literature	M			

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ZHIAO VIET NAM COMPANY LIMITED Technical Report: **96223160080** NOVEMBER 29, 2022 Page 8 of 14

RESULTS:

Standard Consumer Safety Performance Specification for Home Playground Equipment (ASTM F1148-22)

Section	Requirements	Result
4	Materials and Manufacture	-
4.1	General	NT
4.1.1	Metal, wood, plastic	NT
4.1.2	Ingestion, inhalation, or absorb of substance	NT
4.1.3	Lead in Paint	M
5	General Requirements	-
5.1	Applicable to All Home Playground Equipment	NA
5.1.1&5.1.2	Statement of conformance	NA
5.2	Small Parts	NA
6	Performance Requirements	-
6.1	Head and Neck Entrapment	_
6.1.1	Accessible Openings	NA
6.1.2	Completely bounded openings	NA NA
6.1.3	Nonrigid Completely Bounded Openings	NA NA
6.2	Acute Angles	NA NA
	Protrusions	
6.3	- Townseless	M
6.4	Edges, Points, and Surfaces	M
6.5	Open Tubing	NA NA
6.6	Crush and Shear Points	NA
6.7	Holes and Slots	M
6.8	Hardware	NM
6.9	Hooks	NA
6.10	Hand Support: Hand Gripping/Grasping Components	NA
7	Requirements for Access	-
7.1	Rung Ladders, Stepladders, and Stairways	NA
7.2	Handrails	NA
7.3	Guardrails and Protective Barriers	NA
8	Equipment	-
8.1	Swings	NA
8.2	Slides	М
8.3	Merry-Go-Rounds	NA
8.4	Ropes	NA
9	Equipment Layout	-
9.1	Play Structure Use Zone	NA
10	Installation	-
10.1	Installation Instructions and Information	NM
11	Structural Integrity	-
11.1	General	NA
11.1.1	Handholds, Footholds, and Horizontal Supporting Members	NA NA
11.1.2	Top Support Bar	NA NA
11.1.3	Individual Suspended Units	NA NA
11.1.4	Slides	M
11.1.4	Rockers	NA
11.1.6	Merry-Go-Rounds	NA NA
11.1.7	Climbing Towers/Jungle Gyms	NA NA
11.1.8	Platforms	NA



ZHIAO VIET NAM COMPANY LIMITED Technical Report: **96223160080** NOVEMBER 29, 2022 Page 9 of 14

Standard Consumer Safety Performance Specification for Home Playground Equipment (ASTM F1148-22)

Section	Requirements	Result
11.1.9	Climbing Components	NA
12	Maintenance Instructions	M
13	Labeling and Signage	M
14	Information	M

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ZHIAO VIET NAM COMPANY LIMITED Technical Report: **96223160080** NOVEMBER 29, 2022 Page 10 of 14

RESULT(S):

Evaluation	Citation / Method	Test procedure	Results	Rating
Sharp points and Sharp edges	16 CFR 1500.48 16 CFR 1500.49 (Modify)	Shall not have accessible, potentially hazardous sharp point and/ or sharp edge before or after use and abuse testing. Modify: Expends scope to all children products.	М	PASS

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ZHIAO VIET NAM COMPANY LIMITED Technical Report: **96223160080** NOVEMBER 29, 2022 Page 11 of 14





ZHIAO VIET NAM COMPANY LIMITED Technical Report: **96223160080** NOVEMBER 29, 2022 Page 12 of 14



CA PROP65 LABEL



TRACKING LABEL



WARNING LABEL OF SLIDE



ZHIAO VIET NAM COMPANY LIMITED Technical Report: **96223160080** NOVEMBER 29, 2022 Page 13 of 14

WARNING LABEL











ZHIAO VIET NAM COMPANY LIMITED Technical Report: **96223160080** NOVEMBER 29, 2022 Page 14 of 14

