

Test Report

Test Report No.:27043395

Issue Date:25/10/19(DD/MM/YY)

Client Information:

Supplier No. : S0407
Client Company Name : Tiger New Surface Materials (Suzhou) Co., Ltd.
Contact Address : No.28 Qingdao Road(E), Taicang City, Jiangsu Province
Client Contact Person : Tianhe Dai
IKEA Contacts Person : /
Sample Receive Date : 08/10/19
Date(s) of testing : 08/10/19 to 25/10/19

Sample information by applicant:

Article No. : 80371520,20371523,60371521
Article Name : TROGEN child step stl 40x38x33 yellow
Article Date Stamp : WK1937
Material Producer : /
Material Description : /
Material Batch Number/Production Date : /
Test Type : Verifying Test
Identification Code : /
Sample Description : /
Additional Information : powder coating(512/10039,530/20049)



Information By Lab : /

Test Method:

1.Emission(VOCs, Formaldehyde and lower aldehyde), ISO 16000-3, -6, -9 acc. to IOS-MAT-0054

Remark:

"No Conclusion":combined with the expanded uncertainty, unable to rate the result due to the result both in and out of the limit.
"/":unable to rate the result due to no limit offered or test result is N.A. / N.T. /N.R.*.



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**For further details, pls refer to the following page(s).*

Mindy Pan
ITTC Deputy General Manager

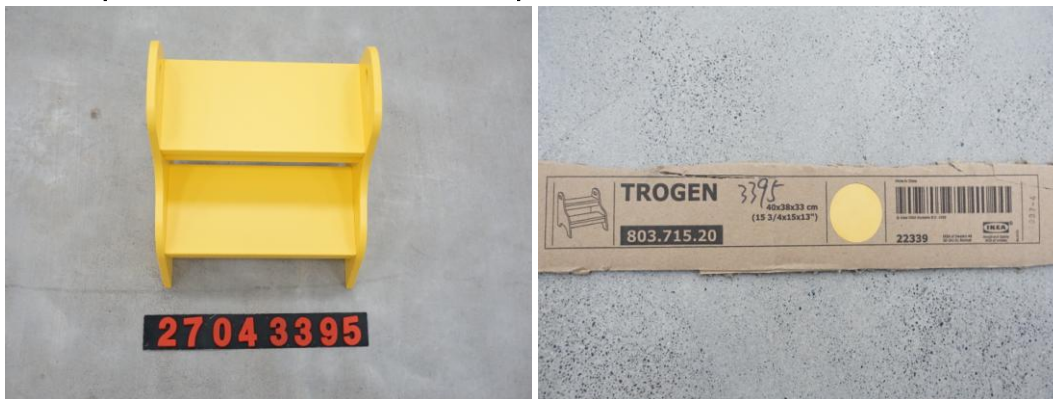
Jenny Liu
Lab Manager
Approved Signatory

*The test results exclusively relate to the samples under test sent by customer.
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1. Determination of the Emission of Volatile Organic Compounds (VOCs), Formaldehyde and Other Lower Aldehydes

Test sample: The surface area is 0.52 m². See photo below.



(Sample 27043395: PE membrane/cardboard wrapped separately, wrapping OK)

Notice: Tested sample/material will be stored for one week after test report date. Please contact us if more storage time required. Please mark in application form if sample/material needs to be returned.

Please notice the tested sample/material for emission tests cannot be retained for repeated tests; it will only be stored for identification and documentation purpose.

Methods:

Chamber emission test: The sample was tested in the emission test chamber without prior conditioning. After defined times samples of the chamber air were collected on sorbent tubes (Tenax TA) and analyzed on a Thermal Desorber-GC/MS system for volatile organic compounds test. The compounds were identified using MS-Spectra library. Quantification was done using pure reference compound mixtures. Samples of the chamber air were collected on DNPH-Silica cartridge and analyzed on a UPLC/PDA for the Formaldehyde and other lower aldehydes test, the compounds were identified by comparing the retaining time with that of the standard. The report limit for the volatile organic compounds test is 1 µg/m³. The report limit for the Formaldehyde and other lower aldehydes test is 10 µg/m³. The measurements were performed with reference to ISO 16000 part 3, 6, 9 and 11.

Parameters of the emission chamber test:

Chamber type: 1 m³ Climate Chamber

Climate condition: 23 °C, 50% R.H.

Loading Factor: 0.52 m²/m³

Air exchange rate: 0.52 h⁻¹

Test started: 2019-10-17

Results:

Result of the Emission of Volatile Organic Compounds (VOCs)

Compound	CAS Number	Concentration after 5 h (µg/m ³)	Concentration after 24 h (µg/m ³)	Concentration after 48 h (µg/m ³)	Information
Acetone	67-64-1	13	13	10	<C6 b c
Hexanal	66-25-1	4	5	4	b d

Compound	CAS Number	Concentration after 5 h (µg/m³)	Concentration after 24 h (µg/m³)	Concentration after 48 h (µg/m³)	Information
Cyclohexanone	108-94-1	2	3	3	b d
Sum of all detected compounds:		19	21	17	/
Sum of VVOC (<C6):		13	13	10	/
Sum of VOC (C6~C16):		6	8	7	/
Sum of SVOC (>C16):		<1	<1	<1	/
Sum of chlorinated volatile organic compounds:		<1	<1	<1	/
Sum of all C6~C9 aromatic hydrocarbons:		<1	<1	<1	/
TVOC (toluene equivalent):		3	3	3	/

(The compounds shown in subscript were used for the semi-quantification)

Remark: "<" denotes "less than"

Information: (a) Toxic substance: CMR Cat. 1A or 1B, STOT RE 1, STOT SE 1, or Acute Tox Cat. 1-3; (b) EU LCI list; (c) safe sampling volume too low to quantify without tube breakthrough; (d) odor relevant; (e) compound boiling point exceeds thermal limit of the TD, underestimation likely; (f) terpene, possibly wood-related; (g) CMR Cat. 1A or 1B; (h) All C6~C9 Aromatic substance according to IOS-MAT-0054/IOS-PRG-0010; (i) Chlorinated solvent according to IOS-MAT-0054/IOS-PRG-0010; (<C6) VVOC compound; (>C16) SVOC compound.

Results of Formaldehyde and other lower aldehydes

Compound	CAS Number	Concentration after 5 h (µg/m³)	Concentration after 24 h (µg/m³)	Concentration after 48 h (µg/m³)
Formaldehyde	50-00-0	< 10	< 10	< 10
Acetaldehyde	75-07-0	< 10	< 10	< 10
Other aldehydes	/	< 10	< 10	< 10

Remark: "<" denotes "less than"

Evaluation according to IOS-MAT-0054: AA-92520-11

Item	Conclusion
Sum of VOC ≤ 1.2mg/m³ after 48 h	OK
Sum of VOC ≤ 0.6mg/m³ after 28 day (if need)	/
Each individual CMR-Substance ≤ 10 µg/m³ after 48 h	OK
Sum of all CMR-Substance ≤ 50 µg/m³ after 48 h	OK
Each individual T-Substance(excl. CMR cat. 1A and 1B) ≤ 30 µg/m³ after 48 h	OK
Sum of all C6~C9 aromatic hydrocarbons ≤ 100 µg/m³ after 48 h	OK
Individual chlorinated substances ≤ 10 µg/m³ after 48 h	OK
Formaldehyde ≤ 120 µg/m³ after 48 h	OK

("OK" = assessed as compliant)

-----End of Report-----