

**Report No.:** 1613043872-01b

Page 1 of 10

**Client:** **Interbuild Far East (HK) Ltd.**  
Room 2103, Futura Plaza, 111 How Ming Road, Kwun Tong, Hong Kong

**Test Item(s):** Wooden board with finishing

**Identification/ Model No(s):** Item 1: INTERBUILD-ADORA HARDWAX OIL 2 STEPS; MODEL: A1; MATERIAL: #174: DH859 & DG734; COLOR: 1. WB EQUALIZING STAIN COLOR, 2. HARDWAX OIL COLOR. END POLISH BEFORE PACKING

Item 2: INTERBUILD-ADORA HARDWAX OIL 2 STEPS; MODEL: #182.A1; COLOR: 1. WB EQUALIZING STAIN COLOR, 2. HARDWAX OIL COLOR, END POLISH BEFORE PACKING

**Sample receiving date:** 2017-10-06 and 2017-11-20

**Test period:** 2017-10-11 to 2017-10-24 and 2017-11-21 to 2017-12-07
**Test Specification:****Test result:**

Performed parameters for the compliance with the following regulations concerning materials in contact with foodstuffs

German Food &amp; Feed Acts LFGB section 31

Test parameters and conditions chosen by customer

1. Sensorial examination	Pass
2. Chlorinated phenols (PCP, TeCPs, TriCPs)	Pass
3. Screening of Pesticides	Pass
4. Specific migration of Formaldehyde	Pass
5. Specific Migration of Polycyclic aromatic hydrocarbons (PAHs)	Pass
6. Colourfastness to food simulants	Pass
7. <sup>(*)</sup> Specific Migration of Primary Aromatic Amines	Pass
8. <sup>(*)</sup> Extraction of Isothiazolinones (OIT)	Pass

**Other Information:** <sup>(\*)</sup>These tests were performed by TUV RHEINLAND HONG KONG

This report replaces the one No. 1613043872-01a due to adding the result of Extraction of OIT on improved sample A000654181-001~002 on page 10 as customer request.

**For and on behalf of**  
**TÜV Rheinland (Vietnam) Co., Ltd.**


2017-12-08

**Hoa Thi Xuan Dieu**  
**Project Manager**

Date

Name/Position

*Test result is drawn according to the kind and extent of tests performed.*

*This test report relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.*

**MATERIAL LIST**

Mat. No.	Material	Color	Location
M001	Wood+Coating	Brown	Item 1 - Wooden board A1
M002	Wood+Coating	Brown	Item 2 - Wooden board A1

**TEST RESULTS****1. Sensorial Examination**

Test method: It is examined to the extent of food simulant being used, which comes into contact with the product, undergoes detectable changes in taste and smell.

For this purpose, the food simulant was stored in the product under the below mentioned time and temperature. Afterwards, the food simulant was examined by an appropriate number of tasters with regard to any divergence in smell and taste. Another test sample, which was used as a reference, was treated by the same way except that it had no contact with the product to be tested.

*Before testing, the product had been cleaned according to the product's instruction manual or in the absence of such manual, by normal household cleaning.*

The test is carried out on the basis of DIN 10955:2004 by paired comparison test:

Evaluation scheme:	0 =	No discernible deviation
	1 =	Barely discernible deviation
	2 =	Weak deviation
	3 =	Clear deviation
	4 =	Strong deviation
	Limit:	3 (failed)

The following simulation solvents and test conditions were applied:

Food simulant	Test duration / Temperature
Cucumber	1 hour / 40°C

Test No.:	T001
Material No.:	M001
<b>Test parameter</b>	<b>Result (Average)</b>
Transfer of smell into foodstuffs	1
Transfer of taste into foodstuffs	1
<b>Conclusion</b>	<b>Pass</b>

Test Report No.: 1613043872-01b

Page 3 of 10

## 2. Chlorinated phenols (PCP, TeCPs, TriCPs)

Test method: Ref. to 64 LFGB B82.02-8:2001

Limit: With reference to Resolution ResAP (2002) 1 on paper and board materials and articles intended to come into contact with foodstuffs

Test No.:	T001				
Material No.:	M001				
Parameter	Unit	RL	Result	Limit	Technically preventable limit
Pentachlorophenol (PCP)	mg/kg	0.1	n.d.	0.15	-
Trichlorophenol (TriCP)	mg/kg	0.1	n.d.	-	n.d.
Tetrachlorophenol (TeCP)	mg/kg	0.1	n.d.	-	n.d.

The examined item meets the requirement.

Abbreviations:

n.d. = Not detected

mg/kg = Milligram per kilogram

&lt; = Less than

## 3. Screening Pesticides

Test method: Organic solvent extraction, GC-ECD, GC-MS

Table 1: Selected Pesticides being tested

Test No.:	T001				
Material No.:	M001				
Selected Pesticides	Cas no.	Unit	RL	Result	Limit <sup>(1)</sup>
Allethrin	584-79-2	mg/kg	0.15	n.d.	n.d.
1-chloronaphthalene	90-13-1	mg/kg	0.15	n.d.	n.d.
2-chloronaphthalene	91-58-7	mg/kg	0.15	n.d.	n.d.
Chloropyrifos	2921-88-2	mg/kg	0.15	n.d.	n.d.
Chlorothalnil	1897-45-6	mg/kg	0.15	n.d.	n.d.
Cyfluthrin	68359-37-5	mg/kg	0.15	n.d.	n.d.
Cypermethrin	52315-07-8	mg/kg	0.15	n.d.	n.d.
DDE	3424-82-6, 72-55-9	mg/kg	0.15	n.d.	n.d.
DDT	50-29-3, 789-02-6	mg/kg	0.15	n.d.	n.d.
Diazinon	333-41-5	mg/kg	0.15	n.d.	n.d.
Dichlofluanid	1085-98-9	mg/kg	0.15	n.d.	n.d.
Dieldrin	60-57-1	mg/kg	0.15	n.d.	n.d.
α-Endosulfan	959-98-8	mg/kg	0.15	n.d.	n.d.

**Test Report No.: 1613043872-01b**

Page 4 of 10

β-Endosulfan	33213-65-9	mg/kg	0.15	n.d.	n.d.
Fenitrothion	122-14-5	mg/kg	0.15	n.d.	n.d.
Fenthion	55-38-9	mg/kg	0.15	n.d.	n.d.
Fenvalerate	51630-58-1	mg/kg	0.15	n.d.	n.d.
Furmecyclox	60568-05-0	mg/kg	0.15	n.d.	n.d.
Hexachlorobenzene	118-74-1	mg/kg	0.15	n.d.	n.d.
Lindane(g-HCH)	58-89-9	mg/kg	0.15	n.d.	n.d.
Malathion	121-75-5	mg/kg	0.15	n.d.	n.d.
Methoxychlor	72-43-5	mg/kg	0.15	n.d.	n.d.
Parathion-ethyl	56-38-2	mg/kg	0.15	n.d.	n.d.
Parathion-methyl	298-00-0	mg/kg	0.15	n.d.	n.d.
Pentachloroanisole	1825-21-4	mg/kg	0.15	n.d.	n.d.
Permethrin	52645-53-1	mg/kg	0.15	n.d.	n.d.
Piperonyl butoxide	51-03-06	mg/kg	0.15	n.d.	n.d.
Propiconazole	60207-90-1	mg/kg	0.15	n.d.	n.d.
Propoxur	114-26-1	mg/kg	0.15	n.d.	n.d.
Tebuconazole	107534-96-3	mg/kg	0.15	n.d.	n.d.
Tetrachlorvinylphos	22248-79-9	mg/kg	0.15	n.d.	n.d.
Tetramethrin	7696-12-0	mg/kg	0.15	n.d.	n.d.
Tolyfluanid	731-27-1	mg/kg	0.15	n.d.	n.d.

The examined item meets the requirement

Remark:

\*1 Technically preventable limit

Abbreviations:

n.d. = Not detected (&lt;0.15 mg/kg)

mg/kg = Milligram per kilogram

&lt; = Less than

#### 4. Specific migration of formaldehyde

**Test method:** The sample preparation is performed with reference to EN 13130-1:2004. Test conditions are chosen with reference to Directive 82/711/EEC, Council Directive 85/572/EEC and its corresponding regulations. Presence of Formaldehyde is detected with reference to EN 13130-23.

**Limit:** With reference to Commission Regulation (EU) No 10/2011 and amendments

The following simulation solvents and test conditions were applied:

Food simulant	Test duration / Temperature
Acid acetic 3%	70°C / 2 hours

Test No:	T001		
Material No.	M001		
Test parameter	Unit	Result	Limit
Migration of formaldehyde	mg/kg	< 3	15

The examined item meets the requirement.

Abbreviations:

n.d. = Not detected (<0.01 mg/kg)

mg/kg = Milligram per kilogram

< = Less than

### 5. Specific Migration of Polycyclic Aromatic Hydrocarbons (PAHs)

Test method: The sample preparation is performed with reference to EN 13130-1:2004. Test conditions are chosen according to Directive 82/711/EEC, Council Directive 85/572/EEC and its corresponding regulations. Presence of PAHs is detected by means of GC-MS.

Limit: Please refer to remark 1

The following food simulant and condition was applied:

Food simulant	Test duration / Temperature
Isooctane	30 mins / 40 °C

Test No.:	T001		
Material No.:	M001		
Parameter	Unit	Result	Limit
Sum of 18 PAHs <sup>(2)</sup>	mg/kg	n.d	n.d.

The examined item meets the requirement.

Abbreviations:

n.d. = Not detected (<0.01 mg/kg)

mg/kg = Milligram per kilogram

< = Less than

Remark:

Acc. to the World Health Organization (WHO) numerous representatives of the Polycyclic Aromatic Hydrocarbons (PAH) substance group are classified as carcinogenic, mutagenic or teratogenic (CMR). Under the principles of Article 3 of the Regulation (EC) 1935/2004 it must be ensured that these substances do not transfer into foodstuffs. Therefore no migration into foodstuffs shall be detectable.

\*2 The selection of analysed PAHs has been based on AfPS GS 2014:01 PAK.

### 6. Colourfastness to food simulants

Test method: Paper and board intended to come into contact with foodstuffs –  
 Determination of colourfastness of dyed paper and board; DIN EN 646.

Test condition is specified by client

Requirement: BfR Recommendations on Food Contact Materials (formerly “Plastics  
 Recommendations”) Part XXXVI, 2014 “Paper and board for food contact”.

Test No.:	T001	
Material No.:	M001	
<b>Colourfastness of paper</b>	<b>Unit</b>	<b>Result</b>
Method	-	A
Colourfastness to saliva solution 10 mins/ 23°C	Grade	5
Colourfastness to fat/oil 10 mins/ 23°C	Grade	5
Colourfastness to acetic acid 10 mins/ 23°C	Grade	5
Colourfastness to water 10 mins/ 23°C	Grade	5

The examined item meets the requirement.

## 7. Migration of Primary Aromatic Amines

**Test method:** The sample preparation is performed with reference to EN 13130-1:2004. Test conditions are chosen with reference to Directive 82/711/EEC, Council Directive 85/572/EEC and its corresponding regulations. Presence of primary aromatic amines is carried out with reference to Kunststoffe im Lebensmittelverkehr, Book 2, Teil B II, XXI.

**Limit:** With reference to Commission Regulation (EU) No 10/2011 and amendments

The following simulation solvents and test conditions were applied:

Food simulant	Test duration / Temperature
Distilled water	24 hours/ 40°C

Test No.:	T001		
Material No.	M001		
<b>Test parameter</b>	<b>Unit</b>	<b>Result</b>	<b>Limit</b>
Primary aromatic amines	mg/kg	< 0.01	< 0.01

The examined item meets the requirement.

(\*). This test was performed by TUV RHEINLAND HONG KONG, report No.: 0144163304a 001f

### Abbreviations:

n.d. = Not detected (<Reporting Limit)

RL = Reporting Limit

mg/kg = milligram per kilogram



Test Report No.: 1613043872-01b

Page 9 of 10

Table 1: Screening List of Primary Aromatic Amines

Parameter	CAS no.	Parameter	CAS no.
2,4,5-Trimethylaniline	137-17-7	2,4-Dimethylaniline	95-68-1
2,4-Diaminoanisole	615-05-4	2-ethoxyaniline	94-70-2
2-Naphthylamine	91-59-8	3-Amino-4-methoxybenzanilide	120-35-4
3,3'-Dichlorobenzidine	91-94-1	3-Amino-4-methylbenzamide	19406-86-1
4,4'-methylene-bis-(2-chloro-aniline)	101-14-4	4,4'-Methylenebis-(3-chloro-2,6-diethylaniline)	106246-33-7
4,4'-methylenedianiline	101-77-9		
4,4'-oxydianiline	101-80-4	4-aminobenzamide	2835-68-9
4,4'-thiodianiline	139-65-1	4-chloro-2,5-dimethoxyaniline	6358-64-1
4-aminoazobenzene	60-09-3	4-Ethoxyaniline	156-43-4
4-aminobiphenyl	92-67-1	Benzoguanamine	91-76-9
4-chloro-o-toluidine	95-69-2	Dimethyl-2-aminoterephthalate	5372-81-6
o-anisidine	90-04-0	2-Chloroaniline	95-51-2
Benzidine	92-87-5	5-Chloro-2-methoxyaniline	95-03-4
4-chloroaniline	106-47-8	2-Nitroaniline	88-74-4
o-aminoazotoluene	97-56-3	1,3-Diiminoisindoline	3468-11-9
p-cresidine	120-71-8	2-Chloro-4-nitroaniline	121-87-9
4,4'-bi-o-toluidine	119-93-7	2-Methoxy-4-nitroaniline	97-52-9
2,4-toluenediamine	95-80-7	4-Chloro-3-methoxyaniline	13726-14-2
o-Toluidine	95-53-4	5-Amino-6-methyl-1,3-dihydro-2H-benzimidazol-2-one	67014-36-2
3,3'-Dimethoxybenzidine	119-90-4		
4,4'-Methylene-di-o-toluidine	838-88-0	2-Aminonaphthalene-1-sulfonic acid	81-16-3
m-Anisidine	536-90-3	4-Aminotoluene-3-sulfonic acid	88-44-8
3-Chloroaniline	108-42-9	2,5-Dichloroaniline	95-82-9
o-phenylenediamine	95-54-5	2,4,5-Trichloroaniline	636-30-6
p-phenylenediamine	106-50-3	2,4-Dinitroaniline	97-02-09
m-phenylenediamine	108-45-2	Biphenyl-2-ylamine	90-41-5
2,6-toluenediamine	823-40-5	2-Methyl-4-nitroaniline	99-52-5
p-toluidine	106-49-0	1,5-naphthylenediamine	2243-62-1
m-toluidine	108-44-1	2,6-Dimethylaniline	87-62-7
		2-Methyl-5-nitroaniline	99-55-8
		5-Chloro-2-methylaniline	95-79-4
		Aniline	62-53-3

**8. Extraction of Isothiazolinones (OIT)**

**Test method:** Extraction with reference to DIN EN 645:1994; Test conditions are chosen according to Directive 82/711/EEC, Council Directive 85/572/EEC and its corresponding regulations. Determination of biocides by LC-MSMS

**Limit:** BfR Recommendations on Food Contact Materials (formerly "Plastics Recommendations") Part XXXVI, 2014 (Paper and board for food contact)

Results 3<sup>rd</sup> Migration:

Test No.:	T001		
Material No.:	M002		
<b>Parameter</b>	<b>Unit</b>	<b>Result</b>	<b>Limit</b>
2-Octyl-2H-isothiazol-3-one	µg/dm <sup>2</sup>	<5	5

The examined item meets the requirement.  
 (\*) This test was performed by TUV RHEINLAND HONG KONG

Abbreviations:

- n.d. = Not detected (<Reporting Limit)
- RL = Reporting Limit
- mg/kg = milligram per kilogram
- < = Less than
- µg/dm<sup>2</sup> Microgram per square decimeter

**TESTED SAMPLE PHOTOS:**



Item 1 - Lab I.D.: A000629545-001~009



Item 2 - Lab I.D.: A0006541815-001~002

---End of test report ---