

## Test Report

Test Report No.: 26853300

Issue Date: 25/10/16(DD/MM/YY)

### Client Information:

Supplier No. : S1797  
Client Company Name : RIF Ametist  
Contact Address : 140730,Russian Federation,Moscow region,Roshal,2-y Pyatiletki st.  
Client Contact Person : Medvedeva Olesya  
IKEA Contacts Person : Andrey Yurchenko  
Sample Receive Date/Test Start Date: 17/10/16

### Sample information by applicant:

Article No. : /  
Article Name : /  
Article Date Stamp : /  
Material Producer : RIF Ametist  
Material Description : Polyurethane foam grade ST 1620  
Material Batch Number/Production Date: 3467/30.08.16  
Test type : Verifying Test



**Information By Lab** : white foam

### Test Method:

Lead(Pb) Content acc. to IOS-MAT-0054  
Migration of certain elements - EN 71-3, acc. to IOS-MAT-0054  
MDA-measurements in Polyurethane Foam acc. to IOS-MAT-0010  
TDA -measurements in Polyurethane Foam acc. to IOS-MAT-0010  
Organotin compound acc. to IOS-MAT-0010  
Phthalates acc. to IOS-MAT-0010  
Organotin compounds acc. to IOS-MAT-0054  
Phthalates acc. to IOS-MAT-0054



No.399 Gang Wen Road, Fengxian District Shanghai, China 201413  
Tel:(86-21) 3755 4800 Fax:(86-21) 3755 4819

A handwritten signature in blue ink, which appears to read 'Tony Watson', is written over a light blue horizontal line.

Tony Watson  
ITTC General Manager

*The test results exclusively relate to the samples under test.*

*The test report shall not be reproduced except in full, without the written approval of our laboratory.*

**Determination of Lead (Pb) Content**

(A) Test Result Summary (For IKEA Specification IOS-MAT-0054: AA-92520-9)

Testing Item	Result, mg/kg	IKEA Limit, mg/kg
Pb	< 5	40

Remark: "<" denotes "less than"

(B) Test Method

Testing Item	Testing Method
Pb	With Reference to CPSC-CH-E1002-08.3

**Migration of Certain Elements**

(A) Test Result Summary (For IKEA Specification IOS-MAT-0054: AA-92520-9)

-	Result, mg/kg	Requirement, mg/kg
<b>Category</b>	III	III
<b>Element</b>	-	-
Boron (B)	< 1500	15000
Aluminium (Al)	< 7000	70000
Total Cr	< 0.2	-
Chromium III (Cr III)	NA <sup>#1</sup>	460
Chromium VI (Cr VI)	NA <sup>#1</sup>	0.2
Manganese (Mn)	< 1500	15000
Cobalt (Co)	< 13	130
Nickel (Ni)	< 93	930
Copper (Cu)	< 770	7700
Zinc (Zn)	< 4600	46000
Arsenic (As)	< 4.7	47
Selenium (Se)	< 46	460
Strontium (Sr)	< 5600	56000
Cadmium (Cd)	< 1.7	17
Tin (Sn)	< 18000	180000
Organic tin	< 6 <sup>#2</sup>	12
Antimony (Sb)	< 56	560
Barium (Ba)	< 1875	18750
Mercury(Hg)	< 9.4	94
Lead(Pb)	< 16	160

Remark:

- (a) <sup>#1</sup> First screen test total Cr. If total Cr more than 0.02 mg/kg in category I, 0.005 mg/kg in category II, or 0.2 mg/kg in category III, confirming test would perform by LC-ICP-MS(for Cr VI)
- (b) “<” denotes “less than”
- (c) NA = Not Applicable
- (d) <sup>#2</sup> Confirmation of Organic Tin was performed on the tested component

(B) Test Method

Testing Item	Testing Method
Elements	With reference to EN 71-3: 2013+A1:2014

**Determination of 4,4'-Diaminodiphenylmethane(4,4'-MDA) , 2,2'-MDA and 2,4'-MDA**

(A) Test Result Summary (For IKEA Specification IOS-MAT-0010: AA-10911-13)

Testing Item	CAS No.	Test Results, mg/kg	IKEA Limits, mg/kg
4,4'-MDA	101-77-9	< 1.0	5
2,2'-MDA	6582-52-1	< 1.0	5
2,4'-MDA	1208-52-2	< 1.0	5

Remark: "<" denotes "less than"

(B) Test Method

Testing Item	Testing Method
4,4'-MDA, 2,2'-MDA and 2,4'-MDA	Extraction with 0,1% acetic acid followed by derivatization with pentafluoropropionic acid anhydride (PFPA) and LC or GC-MS analysis, as described in Analytica Chimica Acta 510 (2004) 109-11

**Determination of 2,4-Toluenediamine(2,4-TDA) & 2,6-TDA**

(A) Test Result Summary (For IKEA Specification IOS-MAT-0010: AA-10911-13)

Testing Item	CAS No.	Test Results, mg/kg	IKEA Limits, mg/kg
2,4-TDA	95-80-7	< 1.0	5
2,6-TDA	823-40-5	< 1.0	5

Remark: "<" denotes "less than"

(B) Test Method

Testing Item	Testing Method
2,4-TDA and 2,6-TDA	Extraction with 0,1% acetic acid followed by derivatization with pentafluoropropionic acid anhydride (PFPA) and LC or GC-MS analysis, as described in Analytica Chimica Acta 510 (2004) 109-11

**Determination of Organotin compounds**

(A) Test Result Summary (For IKEA Specification IOS-MAT-0010: AA-10911-13)

Testing Item	Test Results, mg/kg	IKEA Limits, mg/kg
Monobutyltin compounds (MBT)	< 0.05	/
Dibutyltin compounds (DBT)	< 0.05	0.2
Tributyltin compounds (TBT)	< 0.05	0.2
Monooctyltin compounds (MOT)	< 0.05	/
Tetrabutyltin compounds (TeBT)	< 0.05	/
Diocetyl tin compounds (DOT)	< 0.05	/
Triphenyltin compounds (TPhT)	< 0.05	/
Tricyclohexyltin compounds (TCyT)	< 0.05	/
Monomethyltin compounds (MeT)	0.06	/
Dipropyltin compounds (DProT)	< 0.05	/
Diphenyltin compounds (DPhT)	< 0.05	/
Sum of Organotin compounds	0.06	2.5

Remark: "<" denotes "less than"

(B) Test Method

Testing Item	Testing Method
Organotin compounds	Extraction and GC-MS

### Determination of Phthalates

(A) Test Result Summary (For IKEA Specification IOS-MAT-0010: AA-10911-13)

Testing Item	CAS No.	Test Results, mg/kg	IKEA Limits, mg/kg
Di-2-ethylhexyl Phthalate(DEHP)	117-81-7	< 25	100
Di-n-octyl Phthalate(DNOP)	117-84-0	< 25	100
Diisononyl Phthalate(DINP)	28553-12-0/ 68515-48-0	< 100	100
Dibutyl Phthalate(DBP)	84-74-2	< 25	100
Dipentyl phthalate (DAP)	131-18-0	< 25	100
Diisodecyl Phthalate(DIDP)	26761-40-0/ 68515-49-1	< 100	100
Benzyl Butyl Phthalate(BBP)	85-68-7	< 25	100
Diisobutyl Phthalate(DIBP)	84-69-5	< 25	100
Diisoheptyl phthalate (DIHP)	71888-89-6	< 100	100
Dimethoxyethyl phthalate(DMEP)	117-82-8	< 25	100
Dihexyl phthalate (DnHP)	84-75-3	< 25	100
Di(heptyl, nonyl, undecyl) phthalate (DHNUP)	68515-42-4	< 25	100
Diisopentyl phthalate (DIPP)	605-50-5	< 25	100
n-Pentyl-isopentylphthalate	776297-69-9	< 25	100
1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl doesters with 0.3% of dihexyl phthalate	68515-51-5/ 68648-93-1	< 25	100
1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	< 25	100
1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	< 25	100

Remark: "<" denotes "less than"

(B) Test Method

Testing Item	Testing Method
Phthalates	Extraction and GC-MS



**Determination of Organotin compounds**

(A) Test Result Summary (For IKEA Specification IOS-MAT-0054: AA-92520-9)

Testing Item	Test Results, mg/kg	IKEA Limits, mg/kg
Monobutyltin compounds (MBT)	< 0.05	/
Dibutyltin compounds (DBT)	< 0.05	0.1
Tributyltin compounds (TBT)	< 0.05	0.1
Monooctyltin compounds (MOT)	< 0.05	/
Tetrabutyltin compounds (TTBT)	< 0.05	/
Diocyltin compounds (DOT)	< 0.05	/
Triphenyltin compounds (TPhT)	< 0.05	/
Tricyclohexyltin compounds (TCyT)	< 0.05	/
Methyltin compounds (MeT)	0.06	/
Dipropyltin compounds (DProT)	< 0.05	/
Diphenyltin compounds (DPhT)	< 0.05	/
Sum of Organotin compounds	0.06	2.5

Remark: "<" denotes "less than"

(B) Test Method

Testing Item	Testing Method
Organotin	Extraction and GC-MS

**Determination of Phthalates**

(A) Test Result Summary (For IKEA Specification IOS-MAT-0054:AA-92520-9)

Testing Item	CAS No.	Test Results, mg/kg	IKEA Limits, mg/kg
Bis(2-ethylhexyl) phthalate (DEHP)	117-81-7	< 25	100
di-n-octyl phthalate (DNOP)	117-84-0	< 25	100
Diisononyl phthalate (DINP)	28553-12-0	< 100	100
Di-n-butyl phthalate (DBP)	84-74-2	< 25	100
Diisodecyl phthalate (DIDP)	26761-40-0	< 100	100
Benzyl butyl phthalate (BBP)	85-68-7	< 25	100
Diisobutyl phthalate (DIBP)	84-69-5	< 25	100
Diisoheptyl phthalate (DIHP)	71888-89-6	<100	100
Bis(2-methoxyethyl) phthalate (BMEP)	117-82-8	< 25	100
Dihexyl phthalate (DHP)	84-75-3	< 25	100
Di(heptyl, nonyl, undecyl) phthalate (DHNUP)	68515-42-4	< 25	100
Bis(3-methylbutyl) phthalate(DIPP)	605-50-5	< 25	100
n-pentyl-isopentylphthalate	776297-69-9	< 25	100
Dimethyl phthalate (DMP)	131-11-3	< 25	100
Diethyl phthalate (DEP)	84-66-2	< 25	100
Dipropyl phthalate	131-16-8	< 25	100
Diamyl phthalate (DAP)	131-18-0	< 25	100
Dipentyl phthalate ester branched and linear (DAP)	84777-06-0	< 25	100
Bis(4-methyl-2-pentyl)phthalate (BMPP)	146-50-9	< 25	100
Dicyclohexyl phthalate (DCP)	84-61-7	< 25	100
Bis(2-ethoxyethyl) phthalate (BEEP)	605-54-9	< 25	100
Dinonyl phthalate	84-76-4	< 25	100
Butyl Octyl phthalate	84-78-6	< 25	100
Hexyl-2-ethylhexyl phthalate (HEHP)	75673-16-4	< 25	100
Diphenyl phthalate	84-62-8	< 25	100
Dibenzyl phthalate	523-31-9	< 25	100
Bis (2-n-butoxyethyl) phthalate (BBEP)	117-83-9	< 25	100
Di-C7-9-alkyl (branched and linear) phthalate	68515-41-3	< 25	100
Di-C9-11-alkyl (branched and linear) phthalate	68515-43-5	< 25	100
Other phthalates	/	< 25	100
Sum of phthalates		< 100	250

Remark: "<" denotes "less than"

(B) Test Method

Testing Item	Testing Method
Phthalates	With reference to CPSC-CH-C1001-09.3 Extraction and GC-MS

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