

TÜV Rheinland LGA Products GmbH · 51105 Cologne  
Europlast Ltd.  
Podolsk  
Olga Khrenova  
Domodedovskoye shosse Bld 1/1  
142116 pos. Sel'khoztekhnika  
RUSSIAN FEDERATION

Contact  
E-Mail  
Phone  
Fax  
Cologne,

Petra Van Dyck  
Petra.Van.Dyck@de.tuv.com  
+49 221/806-2129  
+49 221/806-2882  
03.04.2019

**Report No.** 0003287683/60 AZ 337805

**Test item:** Six PU foams

**Identification:** Article name: 1. ST 1825, 2. ST 1930, 3. ST 3542, 4. S 3030,  
5. HR 3530, 6. EL 2240  
Date stamp of article: 1. 01.03.2019, 2. 01.03.2019, 3. 20.02.2019,  
4. 05.03.2019, 5. 14.02.2019, 6. 28.02.2019  
Material / Component: Polyurethane foam  
Manufacturer's name: OOO EVROPLAST (Ltd)  
Batch No.: 1. 392019030002, 2. 392019030001, 3. 392019020056,  
4. 392019030008, 5. 392019020044, 6. 392019020084

**Condition at delivery:** No claim

**Date of delivery:** 25.03.2019

**Place of testing:** Cologne

**Test period:** 28.03.2019 to 03.04.2019

**Test scope:** Parameters selected by customer

**Test specification:** IKEA IOS-MAT-0010 Vers. AA-10911-14 dated 2018-06-20

**Test result:** Pass - According to the kind and extent of tests performed the test items meet the test specification.

Cologne, 03.04.2019

X 

Sachverständige(r)/Expert  
Signiert von: Gunther Bier

X 

Sachverständige(r)/Expert  
Signiert von: Petra Van Dyck

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## 1. Results

### Organotin compounds

| Sample No.                         | 337805-007 | 337805-008 | 337805-009 |
|------------------------------------|------------|------------|------------|
| Sample composition                 | Art. 1     | Art. 2     | Art. 3     |
| Unit                               | mg/kg      | mg/kg      | mg/kg      |
| <b>Organotin compounds</b>         |            |            |            |
| Monobutyltin, MBT                  | <0,05      | <0,05      | <0,05      |
| Dibutyltin, DBT                    | <0,005     | <0,005     | <0,005     |
| Tributyltin, TBT                   | <0,005     | <0,005     | <0,005     |
| Tetrabutyltin, TeBT                | <0,05      | <0,05      | <0,05      |
| Monooctyltin, MOT                  | <0,05      | <0,05      | <0,05      |
| Diocetyl tin, DOT                  | <0,05      | <0,05      | <0,05      |
| Tricyclohexyltin, TcyT             | <0,05      | <0,05      | <0,05      |
| Triphenyltin, TPhT                 | <0,005     | <0,005     | <0,005     |
| Dipropyltin                        | <0,05      | <0,05      | <0,05      |
| Diphenyl tin                       | <0,05      | <0,05      | <0,05      |
| Sum of organotin compounds         | n.n.       | n.n.       | n.n.       |
| Sum of tri-organotin compounds     | n.n.       | n.n.       | n.n.       |
| Sum of di-/tri-organotin compounds | n.n.       | n.n.       | n.n.       |

| Sample No.                         | 337805-010 | 337805-011 | 337805-012 |
|------------------------------------|------------|------------|------------|
| Sample composition                 | Art. 4     | Art. 5     | Art. 6     |
| Unit                               | mg/kg      | mg/kg      | mg/kg      |
| <b>Organotin compounds</b>         |            |            |            |
| Monobutyltin, MBT                  | <0,05      | <0,05      | <0,05      |
| Dibutyltin, DBT                    | <0,005     | <0,005     | <0,005     |
| Tributyltin, TBT                   | <0,005     | <0,005     | <0,005     |
| Tetrabutyltin, TeBT                | <0,05      | <0,05      | <0,05      |
| Monooctyltin, MOT                  | <0,05      | <0,05      | <0,05      |
| Diocetyl tin, DOT                  | <0,05      | <0,05      | <0,05      |
| Tricyclohexyltin, TcyT             | <0,05      | <0,05      | <0,05      |
| Triphenyltin, TPhT                 | <0,005     | <0,005     | <0,005     |
| Dipropyltin                        | <0,05      | <0,05      | <0,05      |
| Diphenyl tin                       | <0,05      | <0,05      | <0,05      |
| Sum of organotin compounds         | n.n.       | n.n.       | n.n.       |
| Sum of tri-organotin compounds     | n.n.       | n.n.       | n.n.       |
| Sum of di-/tri-organotin compounds | n.n.       | n.n.       | n.n.       |

Limit values:  
DBT and TBT 0,2 mg/kg each  
Sum of all organotin compounds 2,5 mg/kg

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**Phthalates**

| Sample No.  | 337805-013 | 337805-014 | 337805-015 |
|---|------------|------------|------------|
| Sample composition  | Art. 1     | Art. 2     | Art. 3     |
| Unit  | mg/kg      | mg/kg      | mg/kg      |
| <b>Phthalates</b>   |            |            |            |
| Bis-(2-ethylhexyl)phthalate, DEHP   | <50        | <50        | <50        |
| Benzylbutylphthalate, BBP   | <50        | <50        | <50        |
| Diisodecylphthalate, DIDP   | <50        | <50        | <50        |
| Diisononylphthalate, DINP   | <50        | <50        | <50        |
| Dibutylphthalate, DBP   | <50        | <50        | <50        |
| Di-n-hexyl phthalate, DNHP  | <50        | <50        | <50        |
| 1,2-Benzenedicarboxylic acid, di-C6 -8-branched alkyl esters, C7-rich, DIHP   | <50        | <50        | <50        |
| 1,2-benzenedicarboxylic acid, di-C7-11-branched and linear alkyl ester, DHNUP | <50        | <50        | <50        |
| Diisohexyl phthalate  | <50        | <50        | <50        |
| 1,2-benzenedicarboxylic acid, dipentylester, branched and linear              | <50        | <50        | <50        |
| n-Pentyl-isopentyl phthalate, PiPP  | n.n.       | n.n.       | n.n.       |
| Di-n-pentylphthalate, DnPP  | <50        | <50        | <50        |
| Diisopentylphthalate DiPP   | <50        | <50        | <50        |
| Bis-(2-methoxyethyl) phthalate, BMEP  | <50        | <50        | <50        |
| Dicyclohexylphthalate, DCHP   | n.n.       | n.n.       | n.n.       |
| Diisobutylphthalate, DIBP   | <50        | <50        | <50        |
| 1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters                           | <50        | <50        | <50        |
| Di-n-octylphthalate, DNOP   | <50        | <50        | <50        |

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| Sample No.  | 337805-016 | 337805-017 | 337805-018 |
|---|------------|------------|------------|
| Sample composition  | Art. 4     | Art. 5     | Art. 6     |
| Unit  | mg/kg      | mg/kg      | mg/kg      |
| <b>Phthalates</b>   |            |            |            |
| Bis-(2-ethylhexyl)phthalate, DEHP   | <50        | <50        | <50        |
| Benzylbutylphthalate, BBP   | <50        | <50        | <50        |
| Diisodecylphthalate, DIDP   | <50        | <50        | <50        |
| Diisononylphthalate, DINP   | <50        | <50        | <50        |
| Dibutylphthalate, DBP   | <50        | <50        | <50        |
| Di-n-hexyl phthalate, DNHP  | <50        | <50        | <50        |
| 1,2-Benzenedicarboxylic acid, di-C6 -8-branched alkyl esters, C7-rich, DIHP   | <50        | <50        | <50        |
| 1,2-benzenedicarboxylic acid, di-C7-11-branched and linear alkyl ester, DHNUP | <50        | <50        | <50        |
| Diisohexyl phthalate  | <50        | <50        | <50        |
| 1,2-benzenedicarboxylic acid, dipentylester, branched and linear              | <50        | <50        | <50        |
| n-Pentyl-isopentyl phthalate, PiPP  | n.n.       | n.n.       | n.n.       |
| Di-n-pentylphthalate, DnPP  | <50        | <50        | <50        |
| Diisopentylphthalate DiPP   | <50        | <50        | <50        |
| Bis-(2-methoxyethyl) phthalate, BMEP  | <50        | <50        | <50        |
| Dicyclohexylphthalate, DCHP   | n.n.       | n.n.       | n.n.       |
| Diisobutylphthalate, DIBP   | <50        | <50        | <50        |
| 1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters                           | <50        | <50        | <50        |
| Di-n-octylphthalate, DNOP   | <50        | <50        | <50        |

n.n. not detectable

Limit value 100 mg/kg for each phthalate

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### TDA and MDA

| Sample No.                  | 337805-001 | 337805-002 | 337805-003 |
|-----------------------------|------------|------------|------------|
| Sample composition          | Art. 1     | Art. 2     | Art. 3     |
| Unit                        | mg/kg      | mg/kg      | mg/kg      |
| <b>2,4-Toluyldiamine</b>    | <1         | <1         | <1         |
| 2,6-Toluyldiamine           | <1         | <1         | <1         |
| 2,2-Diaminodiphenylmethane  | <1         | <1         | <1         |
| 2,4-Diaminodiphenylmethane  | <1         | <1         | <1         |
| 4,4'-Diaminodiphenylmethane | <1         | <1         | <1         |

| Sample No.                  | 337805-004 | 337805-005 | 337805-006 |
|-----------------------------|------------|------------|------------|
| Sample composition          | Art. 4     | Art. 5     | Art. 6     |
| Unit                        | mg/kg      | mg/kg      | mg/kg      |
| <b>2,4-Toluyldiamine</b>    | <1         | <1         | <1         |
| 2,6-Toluyldiamine           | <1         | <1         | <1         |
| 2,2-Diaminodiphenylmethane  | <1         | <1         | <1         |
| 2,4-Diaminodiphenylmethane  | <1         | <1         | <1         |
| 4,4'-Diaminodiphenylmethane | <1         | <1         | <1         |

Limit value 5 mg/kg per compound

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## 2. Summary of methods

|                            |                               |                             |
|----------------------------|-------------------------------|-----------------------------|
| <b>Organotin compounds</b> | <b>Standard: ISO/TS 16179</b> | <b>Issue date: 01.08.12</b> |
|----------------------------|-------------------------------|-----------------------------|

Method description:  
Footwear - Critical substances potentially present in footwear and footwear components - Determination of organotin compounds in footwear materials.

|                   |                                 |                             |
|-------------------|---------------------------------|-----------------------------|
| <b>Phthalates</b> | <b>Standard: ISO/DIS 8124-6</b> | <b>Issue date: 01.06.17</b> |
|-------------------|---------------------------------|-----------------------------|

Method description:  
Safety of toys - Part 6: Certain phthalate esters in toys and children's products, method C

|                    |  |  |
|--------------------|--|--|
| <b>TDA and MDA</b> |  |  |
|--------------------|--|--|

Method description:  
Determination of TDA and MDA after extraction with 0,1% acetic acid, afterwards derivatization with pentafluoropropionic acid anhydride (PFPA) and quantification by LC-MS according to Analytica Chimica Acta 510 (2004) 109-119, deviation in sample preparation 0,4 g on 6 ml

----End of report----