# TEST REPORT



| | | | |
|---|---|---|---|
| **LAB LOCATION:** | **VIETNAM** | **REPORT NUMBER:** | **76120-110006** |
| **DATE IN:** | **Nov. 02, 2020** | **DATE OUT:** | **Nov. 10, 2020** |

| | | | |
|---|---|---|---|
| **Applicant:** | Lifetime Products,Inc. | | |
| **Contact:** | Fiona | | |
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| **Copy To:** | - | | |

**OVERALL RATING**

| | |
|---|---|
| **PASS** | **X** |
| **FAIL** | **-** |
| **DATA** | **-** |

**NOTE: RATING IS BASED ON TESTING LAB RESULTS. FINAL ACCEPTANCE OR REJECTION IS PER CLIENT ONLY.**

| Sample Information | | | |
|---|---|---|---|
| **Sample Description** | Climbing Dome, 54'', Brown/ Blue/ PRE-GALVANIZED | | |
| **Item/ Style Number** | 90939/ 91012 | | |
| **Purchase Order Number** | - | **No. of Samples Submitted** | 1 |
| **Country of Origin** | Vietnam | **Country of Destination** | Europe |
| **Vendor/ Agent** | - | **Manufacturer** | Kingtec Group Vietnam Co., Ltd |

| Testing Status | | | |
|---|---|---|---|
| ☐ **Pre-production** | ☐ **Production** | ☐ **Retest** | ☐ **Previous Report No** |
| **Other/ Comments: -** | | | |

Sample Photos



**76120-110006**

*For and on behalf of*
**Modern Testing Services (Vietnam) Ltd.**

**HARRY VU**
**HL. DEPARTMENT SUPERVISOR**

**EXECUTIVE SUMMARY:**

| TESTING RESULT SUMMARY | | | | |
|---|---|---|---|---|
| **Test Property** | **PASS** | **FAIL** | **DATA** | **COMMENTS** |
| Total Lead Content – Entry 63 of Annex XVII of European Regulation (EC) No 1907/2006 | X | - | - | - |
| Total Cadmium Content – Entry 23 of Annex XVII of European Regulation (EC) No 1907/2006 | X | - | - | - |
| Phenylmercury Compounds – Entry 62 of Annex XVII of European Regulation (EC) No 1907/2006 | X | - | - | - |
| Flame Retardants Content – Entry 4, 7, 8 of Annex XVII of European Regulation (EC) No 1907/2006 | X | - | - | - |
| Flame Retardant Content – Entry 45 & 67 of Annex XVII of European Regulation (EC) No 1907/2006 | X | - | - | - |
| Polycyclic Aromatic Hydrocarbons (PAHs) Content – Entry 50 of Annex XVII of European Regulation (EC) No 1907/2006 | X | - | - | - |
| Organostannic Compounds – Entry 20 of Annex XVII of European Regulation (EC) No 1907/2006 | X | - | - | - |
| Dimethyl Fumarate Content – Entry 61 of Annex XVII of European Regulation (EC) No 1907/2006 | X | - | - | - |
| Benzene Content – Entry 5 of Annex XVII of European Regulation (EC) No 1907/2006 | X | - | - | - |
| Phthalates Content – Entry 51 & 52 of Annex XVII of European Regulation (EC) No 1907/2006 | X | - | - | - |
| Migration of Certain Elements – EN 71-3:2019 | X | - | - | - |
| 209 Substances of Very High Concern (SVHC) | X | - | - | - |
| EN 71-1:2014 + A1:2018, “Safety of toys – Part 1: Mechanical and physical properties” | X | - | - | - |
| BS EN 71-2:2011 + A1:2014 SAFETY OF TOYS (FLAMMABILITY) | X | - | - | - |
| EN 71-8:2018 Safety of toys. Activity toys for domestic use | X | - | - | - |

## COMPONENT BREAKDOWN LIST:

| Item No. | Item Description | Accessibility | Material Type |
|---|---|---|---|
| **A** | **Climbing Dome** | **-** | **-** |
| A1 | Brown coating on metal (Metal tube) | A | Coating |
| A2 | Blue coating on metal (Metal tube) | A | Coating |
| A3 | Silvery metal (Metal tube) | A | Metal |
| A4 | Silvery metal (Long - Bolt) | A | Metal |
| A5 | Silvery metal (Small - Bolt) | A | Metal |
| A6 | Silvery metal (Hex nut) | A | Metal |
| A7 | Silvery metal (Flat washer) | IN | Metal |
| A8 | Blue plastic (Climbing grips) | A | Plastic |
| A9 | White paper with black printing and glue backing (Round label) | A | Paper + Printing+ Adhesive |
| A10 | White plastic with black/ orange printing and glue backing (Warning label) | A | Plastic + Printing+ Adhesive |
| A11 | White plastic with black/ green printing and glue backing (Tracking label) | A | Plastic + Printing+ Adhesive |
| **B** | **Packaging materials** | **-** | **-** |
| B1 | Doublewall carton with black/ blue printing (Master carton) | A | Paper + Printing |
| B2 | Doublewall carton (Master carton) | A | Paper |
| B3 | Transparent plastic (Poly bag) | A | Plastic |
| B4 | Transparent plastic with glue backing (Adhesive tape) | A | Plastic + Adhesive |
| B5 | White paper with black printing and glue backing (Label) | A | Paper + Printing |
| B6 | White paper with black printing and glue backing (UPC Label) | A | Paper + Printing |
| B7 | Transparent plastic with black printing (Banding strap) | A | Plastic + Printing |

*Note: A = Accessible; IN = Inaccessible*

## EXHIBIT BREAKDOWN:



**Remark:** (1) Test result was transferred from report #76120-100527.

**TEST RESULT(S):**

**1. Total Lead Content – Entry 63 of Annex XVII of European Regulation (EC) No 1907/2006, EU 836/2012 and EU 2015/628 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)**

| Test Item | Classification | Total Lead (Pb) (mg/kg) | | Conclusion |
|---|---|---|---|---|
| | | Result | Limit | |
| **A1+A2** | Paint or similar surface coating | ND | 500 | PASS |
| **A3+A4** | Accessible substrate | ND | 500 | PASS |
| **A5+A6** | Accessible substrate | ND | 500 | PASS |
| **A8** | Accessible substrate | ND | 500 | PASS |

Method: The sample was digested with acid mixture and analyzed by Atomic Absorption Spectrophotometer / Inductively Coupled Argon Plasma Spectrometer / Inductively Coupled Plasma Mass Spectrometer.

Note: ND = Not Detected (Lab reporting limit: 10 mg/kg)
mg/kg = milligram per kilogram

**2. Total Cadmium Content – Entry 23 of Annex XVII of European Regulation (EC) No 1907/2006, No 552/2009, No 494/2011, No 835/2012 and No 2016/217 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (Former Known as Directive 91/338/EEC)**

| Test Item | Classification | Total Cadmium (Cd) (mg/kg) | | Conclusion |
|---|---|---|---|---|
| | | Result | Limit | |
| **A1+A2** | Paint on painted articles | ND | 1000 | PASS |
| **A8** | Plastics | ND | 100 | PASS |

Method: Plastic - EN 1122: 2001, Method B
Paint / Metal - Sample was digested with acid
The Cadmium content was analyzed Atomic Absorption Spectrophotometer / Inductively Coupled Argon Plasma Spectrometer / Inductively Coupled Plasma Mass Spectrometer.

Note: ND = Not Detected (Lab reporting limit: 10 mg/kg)
mg/kg = milligram per kilogram

**3. Phenylmercury Compounds – Entry 62 of Annex XVII of European Regulation (EC) No 1907/2006 and No 552/2009 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)**

| Test Item | Result (%) | | Conclusion |
|---|---|---|---|
| | Total Mercury (Hg) | Limit | |
| **A1+A2** | ND | 0.01 | PASS |
| **A8** | ND | 0.01 | PASS |

Method: Sample was digested by acid and analyzed Inductively Coupled Argon Plasma Spectrometer / Inductively Coupled Plasma Mass Spectrometer.

Remark: The result is report as total mercury content.

Note: ND = Not Detected (Lab reporting limit: 0.001%)
mg/kg = milligram per kilogram

## 4. Flame Retardants Content – Entry 4, 7, 8 of Annex XVII of European Regulation (EC) No 1907/2006 and No 552/2009 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (Former Known as Directive 79/663/EEC, 83/264/EEC and 2003/11/EC)

| Test Item | Result (%) | | | Conclusion |
|---|---|---|---|---|
| | TRIS | TEPA | PBBs | |
| A8 | ND | ND | ND | PASS |
| Limit | Usage Banned | Usage Banned | Usage Banned | - |

***List of Flame Retardants:***

| Chemical Name | CAS No. | Chemical Name | CAS No. |
|---|---|---|---|
| Tris-(2,3-dibrompropyl) phosphate (TRIS) | 126-72-7 | Polybrominated Biphenyls (PBBs) | 59536-65-1 |
| Tris-azirdinyl phosphinoxide (TEPA) | 545-55-1 | - | - |

Method: Sample was extracted with organic solvent and analyzed by Gas Chromatograph Mass Spectrometer / Liquid Chromatograph Mass Spectrometer.

Note: ND = Not Detected (Lab reporting limit: 0.01%)
% = percentage

## 5. Flame Retardant Content – Entry 45 & 67 of Annex XVII of European Regulation (EC) No 1907/2006, No 552/2009 and No 2017/227 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (Former Known as Directive 79/663/EEC, 83/264/EEC and 2003/11/EC)

| Test Item | Result (%) | | Conclusion |
|---|---|---|---|
| | OctaBDE | DecaBDE | |
| A8 | ND | ND | PASS |
| Limit | 0.1 | 0.1 | - |

***List of Flame Retardants:***

| Chemical Name | CAS No. | Chemical Name | CAS No. |
|---|---|---|---|
| Octabromodiphenyl ether (OctaBDE) | 32536-52-0 | Decabromodiphenyl ether (DecaBDE) | 1163-19-5 |

Method: Sample was extracted with organic solvent and analyzed by Gas Chromatograph Mass Spectrometer / Liquid Chromatograph Mass Spectrometer.

Note: ND = Not Detected (Lab reporting limit: 0.01%)
% = percentage

**6. Polycyclic Aromatic Hydrocarbons (PAHs) Content – Entry 50 of Annex XVII of European Regulation (EC) No 1907/2006, No 552/2009 and No 1272/2013 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (Former Known as Directive 2005/69/EC)**

| Parameter | CAS No. | Unit | Result | Limit |
|---|---|---|---|---|
| | | | A8 | |
| Benzo (a) pyrene | 50-32-8 | mg/kg | ND | 0.5 |
| Benzo (e) pyrene | 192-97-2 | mg/kg | ND | 0.5 |
| Benzo (a) anthracene | 56-55-3 | mg/kg | ND | 0.5 |
| Chrysen | 218-01-9 | mg/kg | ND | 0.5 |
| Benzo (b) fluoranthene | 205-99-2 | mg/kg | ND | 0.5 |
| Benzo (j) fluoranthene | 205-82-3 | mg/kg | ND | 0.5 |
| Benzo (k) fluoranthene | 207-08-9 | mg/kg | ND | 0.5 |
| Dibenzo (a,h) anthracene | 53-70-3 | mg/kg | ND | 0.5 |
| **Conclusion** | | | PASS | - |

Method: Sample was extracted with organic solvent and analyzed by Gas Chromatograph Mass Spectrometer.

Note: ND = Not Detected (Lab reporting limit: 0.1 mg/kg)
mg/kg = milligram per kilogram

**7. Organostannic Compounds (DBT, DOT and Tri-Substituted organostannic compounds) – Entry 20 of Annex XVII of European Regulation (EC) No 1907/2006, No 552/2009 and No. 276/2010 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (European Directive 2009/425/EC)**

| Test Item | Result (%) | | | Conclusion |
|---|---|---|---|---|
| | DBT | DOT | Tri-substituted Organotin compound | |
| **A1+A2** | ND | ND | ND | PASS |
| **A8** | ND | ND | ND | PASS |
| **Limit (% by weight of tin)** | 0.1 | 0.1 | 0.1 | - |

Method: With Reference to ISO 17353

Note: ND = Not Detected (Lab reporting limit: 0.01%)
% = percentage

Remark: This list of Organotin compound is summarized in below table

| List of Organotin compound | | | |
|---|---|---|---|
| Type | Name of Analyte | Type | Name of Analyte |
| I | Tri-substituted Organotin compound<br>- Tripropyltin(TPT) | II | Dibutyltin (DBT) |

| | | | |
|---|---|---|---|
| | - Tributyltin (TBT)<br>- Trioctyl tin(TOT)<br>- Triphenyltin (TPhT)<br>- Tricyclohexyltin(TcyT) | III | Dioctyltin (DOT) |

| List of sample type | |
|---|---|
| Type | Description |
| I | Articles, or part thereof, placed on the market after 1 July 2010 |
| II | Mixtures of articles, or part thereof, placed on the market after 1 January 2012, except materials and articles regulated under Regulation (EC) No 1935/2004; and<br>For the following mixtures or articles, or part thereof, placed on the market after 1 January 2015,<br>one-component and two-component room temperature vulcanization sealants (RTV-1 and RTV-2 sealants) and<br>adhesives<br>paints and coatings containing DBT compounds as catalysts when applied on articles,<br>soft polyvinyl chloride (PVC) profiles whether by themselves or coextruded with hard PVC, fabrics coated with<br>PVC containing DBT compounds as stabilisers when intended for outdoor application, outdoor rainwater pipes,<br>gutters and fittings, as well as covering material for roofing and facades. |
| III | Articles, or part thereof, placed on the market after 1 January 2012,<br>- textile articles intended to come into contact with the skin,<br>- gloves,<br>- footwear or part of footwear intended to come into contact with the skin,<br>- wall and floor coverings,<br>- childcare articles,<br>- female hygiene products,<br>- nappies,<br>- two-component room temperature vulcanization moulding kits (RTV-2 moulding kits) |

## 8. Dimethyl Fumarate Content – Entry 61 of Annex XVII of European Regulation (EC) No 1907/2006, No 552/2009 and No 412/2012 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (Former Known as Directive 2009/251/EC)

| Test Item | Dimethyl Fumarate [CAS No. 624-49-7] (mg/kg) | | Conclusion |
|---|---|---|---|
| | Result | Limit | |
| **B1** | ND | 0.1 | PASS |
| **B2** | ND | 0.1 | PASS |
| **B3** | ND | 0.1 | PASS |
| **B4** | ND | 0.1 | PASS |
| **B5** | ND | 0.1 | PASS |
| **B6** | ND | 0.1 | PASS |
| **B7** | ND | 0.1 | PASS |

Method: Sample was extracted with organic solvent and analyzed by Gas Chromatograph Mass Spectrometer.

Note: ND = Not Detected (Lab reporting limit: 0.1 mg/kg)
mg/kg = milligram per kilogram

## 9. Benzene Content – Entry 5 of Annex XVII of European Regulation (EC) No 1907/2006, No 552/2009 and No. 276/2010 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

| Test Item | Benzene [CAS No. 71-43-2] (mg/kg) | | Conclusion |
|---|---|---|---|
| | Result | Limit | |
| A1 | ND | 5 | PASS |
| A2 | ND | 5 | PASS |
| A8 | ND | 5 | PASS |

Method: Sample was analyzed by Headspace Gas Chromatograph Mass Spectrometer.

Note: ND = Not Detected (Lab reporting limit: 5 mg/kg)
mg/kg = milligram per kilogram

## 10. Phthalates Content – Entry 51 & 52 of Annex XVII of European Regulation (EC) No 1907/2006 and No 552/2009 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (Former Known as Directive 2005/84/EC)

| Test Item | Result (%) (Remark) | | | | | | | | | Conclusion |
|---|---|---|---|---|---|---|---|---|---|---|
| | Part A | | | | | Part B | | | | |
| | DBP | BBP | DEHP | DIBP | Total | DNOP | DIDP | DINP | Total | |
| A1+A2 | ND | ND | ND | ND | ND | ND | ND | ND | ND | PASS |
| A8 | ND | ND | ND | ND | ND | ND | ND | ND | ND | PASS |
| Limit | - | - | - | - | 0.1 | - | - | - | 0.1 | - |

***List of Phthalates:***

| Chemical Name | CAS No. | Chemical Name | CAS No. |
|---|---|---|---|
| Dibutyl phthalate (DBP) | 84-74-2 | Di-n-octyl phthalate (DNOP) | 117-84-0 |
| Butyl benzyl phthalate (BBP) | 85-68-7 | Di-iso-decyl phthalate (DIDP) | 26761-40-0/ 68515-49-1 |
| Di-2-ethylhexyl phthalate (DEHP) | 117-81-7 | Di-iso-nonyl phthalate (DINP) | 28553-12-0/ 68515-48-0 |
| Di-iso-butyl phthalate (DIBP) | 84-69-5 | / | / |

Method: 1) For plasticized or softened material on textile:
With reference to ISO 14389:2014.
2) For other polymeric material:
With reference to EN 14372:2004 Section 6.3.2.

Remark: Toys and childcare articles shall meet the requirement of Part A. Toys and childcare articles, which can be placed in mouth by the children, shall meet the requirements of both Part A and B.

Note: ND = Not Detected (Lab reporting limit: 0.005%)
% = percentage

## 11. Migration of Certain Elements – EN 71-3:2019

**Category III: Scraped-off materials**

| Extractable Elements | Result (mg/kg) | | | | | | | | | Migration Limit (mg/kg) |
|---|---|---|---|---|---|---|---|---|---|---|
| **Test Item** | **A1** | **A2** | **A4** | **A5** | **A6** | **A8** | **A9** | **A10** | **A11[1]** | - |
| **Mass of Trace Amount (mg)** | NA | NA | NA | NA | NA | NA | NA | NA | NA | - |
| Aluminum (Al) | <10 | <10 | <10 | <10 | <10 | <10 | 12 | <10 | <10 | 70000 |
| Antimony (Sb) | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 560 |
| Arsenic (As) | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 47 |
| Barium (Ba) | 220 | 204 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 18750 |
| Boron (B) | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | <100 | 15000 |
| Cadmium (Cd) | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | 17 |
| Chromium (III) (Cr III) | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 460 |
| Chromium (VI) (Cr VI) | <0.053 | <0.053 | <0.053 | <0.053 | <0.053 | <0.053 | <0.053 | <0.053 | <0.053 | 0.053 |
| Cobalt (Co) | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 130 |
| Copper (Cu) | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 7700 |
| Lead (Pb) | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 23 |
| Manganese (Mn) | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 15000 |
| Mercury (Hg) | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 94 |
| Nickel (Ni) | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 930 |
| Selenium (Se) | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 460 |
| Strontium (Sr) | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | <10 | 56000 |
| Tin (Sn) | <0.8 | <0.8 | <0.8 | <0.8 | <0.8 | <0.8 | <0.8 | <0.8 | <0.8 | 180000 |
| Organic Tin | <3 | <3 | <3 | <3 | <3 | <3 | <3 | <3 | <3 | 12 |
| Zinc (Zn) | <10 | <10 | 2411 | 152 | 109 | 37 | <10 | <10 | <10 | 46000 |
| **Conclusion** | PASS | PASS | PASS | PASS | PASS | PASS | PASS | PASS | PASS | - |

Method: With reference to EN 71-3:2019. The heavy metals content was determined by Inductively Coupled Plasma Mass Spectrophotometer (ICP-MS).
For samples of migrated chromium content lower than migration limit of Chromium (VI), no speciation test for Chromium (III) and chromium (VI) were conducted. The results were derived from that of total chromium.
For samples of migrated tin content calculated as tributyl tin lower than migration limit of organic tin, no organic tin test was conducted. The results were derived from that of Tin.

Remark: 1. The material categories of tested item(s) are classified as below per clause 4.1 of this standard.

| **Category I: Dry, brittle, power like or pliable materials** |
|---|
| Compressed paint tablets, materials intended to leave a trace or similar materials in solid form appearing as such in the toy (e.g. the cores of colouring pencils, chalk, crayons) |
| Pliable modelling materials, including modelling clays and plaster |
| **Category II: Liquid or sticky materials** |
| Liquid paints, including finger paints, varnishes, lacquers, liquid ink in pens and similar materials in liquid form appearing as such in the toy (e.g. slimes, bubble solution) |
| Glue sticks |
| **Category III: Scraped-off materials** |
| Coatings of paints, varnishes, lacquers, printing inks, polymers, foams and similar coatings |
| Polymeric and similar materials, including laminates, whether textile reinforced or not, but excluding other textiles |
| Paper and paper board |
| Textiles, whether natural or synthetic |
| Glass, ceramic, metallic materials |
| Other materials whether mass coloured or not (e.g. wood, fibre board, hard board, bone and leather) |

2. Result(s) of organic tin reported was / were the sum of Methyltin (MeT), Butyltin (BuT), Dibutyltin (DBT), Tributyltin (TBT), Tetrabutyltin (TeBT), Monooctyltin (MOT), Di-n-octyltin (DOT), Di-n-propyltin (DProT), Diphenyltin (DPhT), Triphenyltin (TPhT) and Dimethyltin (DMT) expressed as TBT.
3. The accessibility of the submitted sample is verified according to EN71-1 before and after abuse.

Note: mg/kg = milligram per kilogram
mg = milligram
"<" = less than
NA = Not applicable

## 12. 209 Substances of Very High Concern (SVHC) Test based on the SVHC Candidate List published by European Chemicals Agency (ECHA) on January 16, 2020 regarding Regulation (EC) no 1907/ 2006 concerning the REACH

| Test Item | Detected Chemicals | Result (%) | Limit | Conclusion |
|---|---|---|---|---|
| A | - | ND | 0.1 | PASS |
| B | - | ND | 0.1 | PASS |

Method: Sample was tested as composite mixture and extracted and digested with reference to US EPA 3051A, US EPA 8270D, EN ISO 17353 and analyzed by Inductively Coupled Argon Plasma Spectrometer, Inductively Coupled Plasma Mass Spectrometer, Liquid Chromatography Mass Spectrometer, Gas Chromatograph Mass Spectrometer and Gas Chromatograph Electron Capture Detector.

Note: ND = Not Detected (Lab reporting limit: 0.01%)
% = percentage

***List of SVHC:***

| | Substance Name | CAS No. | EC No. |
|---|---|---|---|
| 1 | *Triethyl arsenate | 15606-95-8 | 427-700-2 |
| 2 | *Diarsenic pentaoxide | 1303-28-2 | 215-116-9 |
| 3 | *Diarsenic trioxide | 1327-53-3 | 215-481-4 |
| 4 | *Cobalt dichloride | 7646-79-9 | 231-589-4 |
| 5 | *Sodium dichromate | 7789-12-0<br>10588-01-9 | 234-190-3 |
| 6 | *Lead hydrogen arsenate | 7784-40-9 | 232-064-2 |
| 7 | Dibutyl phthalate (DBP) | 84-74-2 | 201-557-4 |
| 8 | Benzyl butyl phthalate (BBP) | 85-68-7 | 201-622-7 |
| 9 | Bis (2-ethylhexyl)phthalate (DEHP) | 117-81-7 | 204-211-0 |
| 10 | 5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene) | 81-15-2 | 201-329-4 |
| 11 | Anthracene | 120-12-7 | 204-371-1 |
| 12 | 4,4'- Diaminodiphenylmethane (MDA) | 101-77-9 | 202-974-4 |
| 13 | Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified:<br>Alpha-hexabromocyclododecane<br>Beta-hexabromocyclododecane<br>Gamma-hexabromocyclododecane | 3194-55-6 25637-99-4<br>(134237-50-6)<br>(134237-51-7)<br>(134237-52-8) | 247-148-4 and 221-695-9 |
| 14 | [#] Bis(tributyltin)oxide (TBTO) | 56-35-9 | 200-268-0 |
| 15 | Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins) | 85535-84-8 | 287-476-5 |
| 16 | 2,4-Dinitrotoluene | 121-14-2 | 204-450-0 |
| 17 | [a]Anthracene oil | 90640-80-5 | 292-602-7 |
| 18 | [a]Anthracene oil, anthracene paste, distn. Lights | 91995-17-4 | 295-278-5 |
| 19 | [a]Anthracene oil, anthracene paste, anthracene fraction | 91995-15-2 | 295-275-9 |
| 20 | [a]Anthracene oil, anthracene-low | 90640-82-7 | 292-604-8 |
| 21 | [a]Anthracene oil, anthracene paste | 90640-81-6 | 292-603-2 |
| 22 | Diisobutyl phthalate | 84-69-5 | 201-553-2 |
| 23 | *Lead Chromate | 7758-97-6 | 231-846-0 |
| 24 | *Lead Chromate Molybdate Sulfate Red (C.I. Pigment Red 104) | 12656-85-8 | 235-759-9 |
| 25 | *Lead Sulfochromate Yellow<br>(C.I. Pigment Yellow 34) | 1344-37-2 | 215-693-7 |
| 26 | Acrylamide | 79-06-1 | 201-173-7 |
| 27 | Tris(2-chloroethyl)phosphate | 115-96-8 | 204-118-5 |
| 28 | Coal tar pitch, high temperature | 65996-93-2 | 266-028-2 |
| 29 | Trichloroethylene | 79-01-6 | 201-167-4 |
| 30 | *Boric acid | 10043-35-3 /<br>11113-50-1 | 233-139-2 /<br>234-343-4 |
| 31 | *Disodium tetraborate, anhydrous | 1330-43-4<br>12179-04-3<br>1303-96-4 | 215-540-4 |
| 32 | *Tetraboron disodium heptaoxide, hydrate | 12267-73-1 | 235-541-3 |
| 33 | *Sodium chromate | 7775-11-3 | 231-889-5 |
| 34 | *Potassium chromate | 7789-00-6 | 232-140-5 |
| 35 | *Ammonium dichromate | 7789-09-5 | 232-143-1 |
| 36 | *Potassium dichromate | 7778-50-9 | 231-906-6 |
| 37 | *Cobalt (II) sulphate | 10124-43-3 | 233-334-2 |
| 38 | *Cobalt (II) dinitrate | 10141-05-6 | 233-402-1 |
| 39 | *Cobalt (II) carbonate | 513-79-1 | 208-169-4 |

| | Substance Name | CAS No. | EC No. |
|---|---|---|---|
| 40 | *Cobalt (II) diacetate | 71-48-7 | 200-755-8 |
| 41 | 2-Methoxyethanol | 109-86-4 | 203-713-7 |
| 42 | 2-Ethoxyethanol | 110-80-5 | 203-804-1 |
| 43 | *Chromium trioxde | 1333-82-0 | 215-607-8 |
| 44 | * Chromic acid,<br>*Oligomers of chromic acid and dichromic acid,<br>*Dichromic acid | 7738-94-5<br>--<br>13530-68-2 | 231-801-5<br>--<br>236-881-5 |
| 45 | 2-ethoxyethyl acetate | 111-15-9 | 203-839-2 |
| 46 | *Strontium chromate | 7789-06-2 | 232-142-6 |
| 47 | 1,2-Benzenedicarboxylic acid, di-C7-11- branched and linear alkyl esters (DHNUP) | 68515-42-4 | 271-084-6 |
| 48 | Hydrazine | 7803-57-8<br>302-01-2 | 206-114-9 |
| 49 | 1-methyl-2-pyrrolidone | 872-50-4 | 212-828-1 |
| 50 | 1,2,3-trichloropropane | 96-18-4 | 202-486-1 |
| 51 | 1,2-Benzenedicarboxylic acid, di-C6-8- branched alkyl esters, C7-rich (DIHP) | 71888-89-6 | 276-158-1 |
| 52 | *Zirconia Aluminosilicate Refractory Ceramic Fibres | -- | -- |
| 53 | *Calcium arsenate | 7778-44-1 | 231-904-5 |
| 54 | Bis(2-methoxyethyl) ether | 111-96-6 | 203-924-4 |
| 55 | *Aluminosilicate Refractory Ceramic Fibres | -- | -- |
| 56 | *Potassium hydroxyoctaoxodizincate dichromate | 11103-86-9 | 234-329-8 |
| 57 | *Lead dipicrate | 6477-64-1 | 229-335-2 |
| 58 | N,N-dimethylacetamide | 127-19-5 | 204-826-4 |
| 59 | *Arsenic acid | 7778-39-4 | 231-901-9 |
| 60 | 2-Methoxyaniline / o-Anisidine | 90-04-0 | 201-963-1 |
| 61 | *Trilead diarsenate | 3687-31-8 | 222-979-5 |
| 62 | 1,2-dichloroethane | 107-06-2 | 203-458-1 |
| 63 | *Pentazinc chromate octahydroxide | 49663-84-5 | 256-418-0 |
| 64 | 4-(1,1,3,3-tetramethylbutyl)phenol | 140-66-9 | 205-426-2 |
| 65 | Formaldehyde, oligomeric reaction products with aniline | 25214-70-4 | 500-036-1 |
| 66 | Bis(2-methoxyethyl) phthalate | 117-82-8 | 204-212-6 |
| 67 | *Lead diazide, Lead azide | 13424-46-9 | 236-542-1 |
| 68 | *Lead styphnate | 15245-44-0 | 239-290-0 |
| 69 | 2,2'-dichloro-4,4'-methylenedianiline | 101-14-4 | 202-918-9 |
| 70 | Phenolphthalein | 77-09-8 | 201-004-7 |
| 71 | *Dichromium tris(chromate) | 24613-89-6 | 246-356-2 |
| 72 | 1,2-bis(2-methoxyethoxy) ethane (TEGDME; triglyme) | 112-49-2 | 203-977-3 |
| 73 | 1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME) | 110-71-4 | 203-794-9 |
| 74 | 4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol | 561-41-1 | 209-218-2 |
| 75 | 4,4'-bis(dimethylamino) benzophenone (Michler's ketone) | 90-94-8 | 202-027-5 |
| 76 | [4-[4,4'-bis(dimethylamino) benzhydrylidene] cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Violet 3) | 548-62-9 | 208-953-6 |
| 77 | [4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl] methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26) | 2580-56-5 | 219-943-6 |
| 78 | *Diboron trioxide | 1303-86-2 | 215-125-8 |
| 79 | Formamide | 75-12-7 | 200-842-0 |
| 80 | *Lead(II) bis(methane sulfonate) | 17570-76-2 | 401-750-5 |
| 81 | N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base) | 101-61-1 | 202-959-2 |
| 82 | §TGIC (1,3,5-tris (oxiranylmethyl) -1,3,5-triazine-2,4,6(1H,3H,5H)-trione) | 2451-62-9 | 219-514-3 |

| | Substance Name | CAS No. | EC No. |
|---|---|---|---|
| 83 | §β-TGIC (1,3,5-tris [(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione) | 59653-74-6 | 423-400-0 |
| 84 | α,α-Bis[4-(dimethylamino) phenyl]-4 (phenylamino) naphthalene-1-methanol (C.I. Solvent Blue 4) | 6786-83-0 | 229-851-8 |
| 85 | Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE) | 1163-19-5 | 214-604-9 |
| 86 | Pentacosafluorotridecanoic acid | 72629-94-8 | 276-745-2 |
| 87 | Tricosafluorododecanoic acid | 307-55-1 | 206-203-2 |
| 88 | Henicosafluoroundecanoic acid | 2058-94-8 | 218-165-4 |
| 89 | Heptacosafluorotetradecanoic acid | 376-06-7 | 206-803-4 |
| 90 | Diazene-1,2-dicarboxamide (C,C'-azodi(formamide)) | 123-77-3 | 204-650-8 |
| 91 | Cyclohexane-1,2-dicarboxylic anhydride [1]<br>cis-cyclohexane-1,2-dicarboxylic anhydride [2]<br>trans-cyclohexane-1,2-dicarboxylic anhydride [3]<br>*[The individual cis- [2] and trans- [3] isomer substances and all possible combinations of the cis- and trans-isomers [1] are covered by this entry].* | 85-42-7<br>13149-00-3<br>14166-21-3 | 201-604-9<br>236-086-3<br>238-009-9 |
| 92 | Hexahydromethylphthalic anhydride [1],<br>Hexahydro-4-methylphthalic anhydride [2],<br>Hexahydro-1-methylphthalic anhydride [3],<br>Hexahydro-3-methylphthalic anhydride [4]<br>*[The individual isomers [2], [3] and [4] (including their cis- and trans-stereo isomeric forms) and all possible combinations of the isomers [1] are covered by this entry]* | 25550-51-0<br>19438-60-9<br>48122-14-1<br>57110-29-9 | 247-094-1<br>243-072-0<br>256-356-4<br>260-566-1 |
| 93 | 4-Nonylphenol, branched and linear<br>*[substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof]* | -- | -- |
| 94 | 4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated<br>[covering well-defined substances and UVCB substances, polymers and homologues] | -- | -- |
| 95 | Methoxyacetic acid | 625-45-6 | 210-894-6 |
| 96 | N,N-dimethylformamide | 68-12-2 | 200-679-5 |
| 97 | #Dibutyltin dichloride (DBTC) | 683-18-1 | 211-670-0 |
| 98 | *Lead monoxide (Lead oxide) | 1317-36-8 | 215-267-0 |
| 99 | *Orange lead (Lead tetroxide) | 1314-41-6 | 215-235-6 |
| 100 | *Lead bis(tetrafluoroborate) | 13814-96-5 | 237-486-0 |
| 101 | *Trilead bis(carbonate)dihydroxide | 1319-46-6 | 215-290-6 |
| 102 | *Lead titanium trioxide | 12060-00-3 | 235-038-9 |
| 103 | *Lead titanium zirconium oxide | 12626-81-2 | 235-727-4 |
| 104 | *Silicic acid, lead salt | 11120-22-2 | 234-363-3 |
| 105 | *Silicic acid ($H_2Si_2O_5$), barium salt (1:1), lead-doped [with lead (Pb) content above the applicable generic concentration limit for 'toxicity for reproduction' Repr. 1A (CLP) or category 1 (DSD); the substance is a member of the group entry of lead compounds, with index number 082-001-00-6 in Regulation (EC) No 1272/2008] | 68784-75-8 | 272-271-5 |
| 106 | 1-bromopropane (n-propyl bromide) | 106-94-5 | 203-445-0 |
| 107 | Methyloxirane (Propylene oxide) | 75-56-9 | 200-879-2 |
| 108 | 1,2-Benzenedicarboxylic acid, dipentylester, branched and linear | 84777-06-0 | 284-032-2 |
| 109 | Diisopentylphthalate (DIPP) | 605-50-5 | 210-088-4 |
| 110 | N-pentyl-isopentylphthalate | 776297-69-9 | -- |
| 111 | 1,2-diethoxyethane | 629-14-1 | 211-076-1 |

| | Substance Name | CAS No. | EC No. |
|---|---|---|---|
| 112 | *Acetic acid, lead salt, basic | 51404-69-4 | 257-175-3 |
| 113 | *Lead oxide sulfate | 12036-76-9 | 234-853-7 |
| 114 | *[Phthalato(2-)]dioxotrilead | 69011-06-9 | 273-688-5 |
| 115 | *Dioxobis(stearato)trilead | 12578-12-0 | 235-702-8 |
| 116 | *Fatty acids, C16-18, lead salts | 91031-62-8 | 292-966-7 |
| 117 | *Lead cynamidate | 20837-86-9 | 244-073-9 |
| 118 | *Lead dinitrate | 10099-74-8 | 233-245-9 |
| 119 | *Pentalead tetraoxide sulphate | 12065-90-6 | 235-067-7 |
| 120 | *Pyrochlore, antimony lead yellow | 8012-00-8 | 232-382-1 |
| 121 | *Sulfurous acid, lead salt, dibasic | 62229-08-7 | 263-467-1 |
| 122 | *Tetraethyllead | 78-00-2 | 201-075-4 |
| 123 | *Tetralead trioxide sulphate | 12202-17-4 | 235-380-9 |
| 124 | *Trilead dioxide phosphonate | 12141-20-7 | 235-252-2 |
| 125 | Furan | 110-00-9 | 203-727-3 |
| 126 | Diethyl sulphate | 64-67-5 | 200-589-6 |
| 127 | Dimethyl sulphate | 77-78-1 | 201-058-1 |
| 128 | 3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine | 143860-04-2 | 421-150-7 |
| 129 | Dinoseb (6-sec-butyl-2,4-dinitrophenol) | 88-85-7 | 201-861-7 |
| 130 | 4,4'-methylenedi-o-toluidine | 838-88-0 | 212-658-8 |
| 131 | 4,4'-oxydianiline and its salts | 101-80-4 | 202-977-0 |
| 132 | 4-aminoazobenzene | 60-09-3 | 200-453-6 |
| 133 | 4-methyl-m-phenylenediamine (toluene-2,4-diamine) | 95-80-7 | 202-453-1 |
| 134 | 6-methoxy-m-toluidine (p-cresidine) | 120-71-8 | 204-419-1 |
| 135 | Biphenyl-4-ylamine | 92-67-1 | 202-177-1 |
| 136 | o-aminoazotoluene [(4-o-tolylazo-o-toluidine]) | 97-56-3 | 202-591-2 |
| 137 | o-toluidine | 95-53-4 | 202-429-0 |
| 138 | N-methylacetamide | 79-16-3 | 201-182-6 |
| 139 | Cadmium | 7440-43-9 | 231-152-8 |
| 140 | Ammonium pentadecafluorooctanoate (APFO) | 3825-26-1 | 223-320-4 |
| 141 | Pentadecafluorooctanoic acid (PFOA) | 335-67-1 | 206-397-9 |
| 142 | Dipentyl phthalate (DPP) | 131-18-0 | 205-017-9 |
| 143 | 4-Nonylphenol, branched and linear, ethoxylated *[substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, ethoxylated covering UVCB- and well-defined substances, polymers and homologues, which include any of the individual isomers and/or combinations thereof]* | -- | -- |
| 144 | *Cadmium oxide | 1306-19-0 | 215-146-2 |
| 145 | *Lead di(acetate) | 301-04-2 | 206-104-4 |
| *146* | *Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)* | 573-58-0 | 209-358-4 |
| 147 | *Trixylyl phosphate* | 25155-23-1 | 246-677-8 |
| 148 | *Imidazolidine-2-thione; (2-imidazoline-2-thiol)* | 96-45-7 | 202-506-9 |
| 149 | Dihexyl phthalate | 84-75-3 | 201-559-5 |
| 150 | Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo] -5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate (C.I. Direct Black 38) | 1937-37-7 | 217-710-3 |
| 151 | *Cadmium sulphide | 1306-23-6 | 215-147-8 |
| 152 | *Cadmium chloride | 10108-64-2 | 233-296-7 |
| 153 | *Sodium peroxometaborate | 7632-04-4 | 231-556-4 |
| 154 | *Sodium perborate; perboric acid, sodium salt | -- | 239-172-9<br>234-390-0 |
| 155 | 1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear | 68515-50-4 | 271-093-5 |

| | Substance Name | CAS No. | EC No. |
|---|---|---|---|
| 156 | *Cadmium fluoride | 7790-79-6 | 232-222-0 |
| 157 | *Cadmium sulphate | 10124-36-4<br>31119-53-6 | 233-331-6 |
| 158 | 2-Benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320) | 3846-71-7 | 223-346-6 |
| 159 | 2-(2H-Benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328) | 25973-55-1 | 247-384-8 |
| 160 | 2-Ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE) | 15571-58-1 | 239-622-4 |
| 161 | Reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate and 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (reaction mass of DOTE and MOTE) | - | - |
| 162 | 1,2-benzenedicarboxylic acid, di-C6-10- alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate (EC No. 201-559-5) | 68515-51-5<br>68648-93-1 | 271-094-0<br>272-013-1 |
| 163 | 5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [1], 5-secbutyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2] [covering any of the individual isomers of [1] and [2] orany combination there] | - | - |
| 164 | Nitrobenzene | 98-95-3 | 202-716-0 |
| 165 | 2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327) | 3864-99-1 | 223-383-8 |
| 166 | 2-(2H-benzotriazol-2- yl)-4-(tert-butyl)-6-(secbutyl) phenol (UV-350) | 36437-37-3 | 253-037-1 |
| 167 | 1,3-propanesultone | 1120-71-4 | 214-317-9 |
| 168 | Perfluorononan-1-oicacid and its sodium and ammonium salts | 375-95-1<br>21049-39-8<br>4149-60-4 | 206-801-3 |
| 169 | Benzo[def]chrysene (benzo[a]pyrene) | 50-32-8 | 200-028-5 |
| 170 | 4-tert-pentylphenol (PTAP) | 80-46-6 | 201-280-9 |
| 171 | 4-heptylphenol, branched and linear (4-HPbl) | - | - |
| 172 | Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts | 335-76-2 | 206-400-3 |
| 173 | 4,4'-isopropylidenediphenol (Bisphenol A) | 80-05-7 | 201-245-8 |
| 174 | Perfluorohexane-1-sulphonic acid and its salts | - | - |
| 175 | Benz[a]anthracene | 56-55-3<br>1718-53-2 | 200-280-6 |
| 176 | Cadmium carbonate | 513-78-0 | 208-168-9 |
| 177 | Cadmium hydroxide | 21041-95-2 | 244-168-5 |
| 178 | Cadmium nitrate | 10022-68-1<br>10325-94-7 | 233-710-6 |
| 179 | Chrysene | 218-01-9<br>1719-03-5 | 205-923-4 |
| 180 | Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene (“Dechlorane Plus”™) | - | - |
| 181 | Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP) | - | - |
| 182 | Benzene-1,2,4-tricarboxylic acid 1,2 anhydride | 552-30-7 | 209-008-0 |
| 183 | Benzo[ghi]perylene | 191-24-2 | 205-883-8 |
| 184 | Decamethylcyclopentasiloxane | 541-02-6 | 208-764-9 |
| 185 | Dicyclohexyl phthalate | 84-61-7 | 201-545-9 |
| 186 | Disodium octaborate | 12008-41-2 | 234-541-0 |
| 187 | Dodecamethylcyclohexasiloxane | 540-97-6 | 208-762-8 |
| 188 | Ethylenediamine | 107-15-3 | 203-468-6 |
| 189 | Lead | 7439-92-1 | 231-100-4 |

| | Substance Name | CAS No. | EC No. |
|---|---|---|---|
| 190 | Octamethylcyclotetrasiloxane | 556-67-2 | 209-136-7 |
| 191 | Terphenyl, hydrogenated | 61788-32-7 | 262-967-7 |
| 192 | Pyrene | 204-927-3 | 129-00-0; 1718-52-1 |
| 193 | Phenanthrene | 201-581-5 | 85-01-8 |
| 194 | Fluoranthene | 205-912-4 | 206-44-0; 93951-69-0 |
| 195 | Benzo[k]fluoranthene | 205-916-6 | 207-08-9 |
| 196 | 2,2-bis(4'-hydroxyphenyl)-4-methylpentane | 401-720-1 | 6807-17-6 |
| 197 | 1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1]heptan-2-one | 239-139-9 | 15087-24-8 |
| 198 | Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with ≥ 0.1% w/w of 4-nonylphenol, branched and linear (4-NP) | --<br>--<br>3050-88-2 | 701-028-2;<br>247-759-6;<br>608-492-4 |
| 199 | 4-tert-butylphenol | 202-679-0 | 98-54-4 |
| 200 | 2-methoxyethyl acetate | 203-772-9 | 110-49-6 |
| 201 | 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides covering any of their individual isomers and combinations thereof | 67118-55-2;<br>13252-13-6;<br>2062-98-8;<br>62037-80-3 | 266-578-3;<br>236-236-8;<br>218-173-8;<br>700-242-3 |
| 202 | Perfluorobutane sulfonic acid (PFBS) and its salts | -- | -- |
| 203 | Diisohexyl phthalate | 71850-09-4 | 276-090-2 |
| 204 | 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one | 71868-10-5 | 400-600-6 |
| 205 | 2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone | 119313-12-1 | 404-360-3 |
| 206 | Dibutylbis(pentane-2,4-dionato-O,O')tin | 22673-19-4 | 245-152-0 |
| 207 | butyl 4-hydroxybenzoate | 94-26-8 | 202-318-7 |
| 208 | 2-methylimidazole | 693-98-1 | 211-765-7 |
| 209 | 1-vinylimidazole | 1072-63-5 | 214-012-0 |

Remark:

1. * - The concentration of list substances were calculated as selected element(s).
2. # - The concentration of Bis(tributyltin) oxide TBTO and Dibutyltin dichloride DBTC were calculated based on Tributyltin, TBT and Dibutyltin, DBT amount in sample, respectively. The result covers TBTO with other salts of TBT and DBTC with other salts of DBT under current technologies. Further investigation is required to determine the exact amount of TBTO and DBTC in sample.
3. a - The anthracene oil derivates are complex and consists of variable compositions of Polycyclic Aromatic Hydrocarbons (PAHs) and Carbazoles. The amount of Anthracene oil derivates are calculated by the composition of PAHs and Carbazoles found in sample.
4. § - TGIC (1,3,5-tris (oxiranylmethyl) -1,3,5-triazine-2,4,6(1H,3H,5H)-trione) andβ-TGIC (1,3,5-tris [(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione) are reported as a mixture.
5. The chemical analysis of the Substance of Very High Concern is performed by currently available analytical techniques against the candidate list published by ECHA on July 16, 2019. This list was not finalized by ECHA and it may subject to change in the future.

**TEST RESULT(S):**

**1. EN 71-1:2014 + A1:2018, "Safety of toys – Part 1: Mechanical and physical properties"**

AGE GRADE EVALUATION:
Client requested age grade: /
Labeled age grade: 3 to 10 years old
Appropriate age grade: /
Age grade for testing: 3 to 10 years old

**RESULTS:**

| SUBCLAUSE | REQUIREMENT | RESULT |
|---|---|---|
| **4** | **GENERAL REQUIREMENTS** | P |
| 4.1 | Material cleanliness | P |
| 4.2 | Assembly | P |
| 4.3 | Flexible plastic sheeting | NA |
| 4.4 | Toy Bags | NA |
| 4.5 | Glass | NA |
| 4.6 | Expanding materials | NA |
| 4.7 | Edges | P |
| 4.8 | Points and metallic wires | P |
| 4.9 | Protruding parts | NA |
| 4.10 | Parts moving against each other | NA |
| 4.11 | Mouth-actuated toys and other toys intended to be put in the mouth | NA |
| 4.12 | Balloons | NA |
| 4.13 | Cords of toy kites and other flying toys | NA |
| 4.14 | Enclosures | NA |
| 4.15 | Toys intended to bear the mass of a child | P |
| 4.16 | Heavy immobile toys | NA |
| 4.17 | Projectiles | NA |
| 4.18 | Aquatic toys and inflatable toys | NA |
| 4.19 | Percussion caps specifically designed for use in toys and toys using percussion caps | NA |
| 4.20 | Acoustics | NA |
| 4.21 | Toys containing a non-electrical heat source | NA |
| 4.22 | Small balls | NA |
| 4.23 | Magnets | NA |
| 4.24 | Yo-yo balls | NA |
| 4.25 | Toys attached to food | NA |
| **5** | **TOYS INTENDED FOR CHILDERN UNDER 36 MONTHS** | NA |
| 5.1 | General requirements | NA |
| 5.2 | Soft-filled toys and soft-filled parts of a toy | NA |
| 5.3 | Plastic sheeting | NA |
| 5.4 | Cords, chains and electrical cables in toys | NA |
| 5.5 | Liquid-filled toys | NA |

| SUBCLAUSE | REQUIREMENT | RESULT |
|---|---|---|
| 5.6 | Speed limitation of electrically-driven ride-on toys | NA |
| 5.7 | Glass and porcelain | NA |
| 5.8 | Shape and size of certain toys | NA |
| 5.9 | Toys comprising monofilament fibres | NA |
| 5.10 | Small balls | NA |
| 5.11 | Play figures | NA |
| 5.12 | Hemispheric-shaped toys | NA |
| 5.13 | Suction cups | NA |
| 5.14 | Straps intended to be worn fully or partially around the neck | NA |
| **6** | **PACKAGING** | P |
| **7** | **WARNING, MARKINGS AND INSTRUCTION FOR USE** | P |
| 7.1 | General | P |
| 7.2 | Toys not intended for children under 36 months | P |
| 7.3 | Latex balloons | NA |
| 7.4 | Aquatic toys | NA |
| 7.5 | Functional toys | NA |
| 7.6 | Hazardous sharp functional edges and points | NA |
| 7.7 | Projectiles | NA |
| 7.8 | Imitation protective masks and helmets | NA |
| 7.9 | Toy kites | NA |
| 7.10 | Roller skates, inline skates, skateboards and certain other ride-on toys | NA |
| 7.11 | Toys intended to be attached to or strung across a cradle, cot, or perambulator | NA |
| 7.12 | Liquid-filled tethers | NA |
| 7.13 | Percussion caps specifically designed for use in toys | NA |
| 7.14 | Acoustics | NA |
| 7.15 | Toy bicycles | NA |
| 7.16 | Toys intended to bear the mass of a child | NA |
| 7.17 | Toys comprising monofilament fibres | NA |
| 7.18 | Toy Scooters | NA |
| 7.19 | Rocking horse and similar toys | NA |
| 7.20 | Magnetic/electrical experimental sets | NA |
| 7.21 | Toys with electrical cables exceeding 300mm in length | NA |
| 7.22 | Toys with cords or chains intended for children of 18 months and over but under 36 months | NA |
| 7.23 | Toys intended to be attached to a cradle, cot or perambulator | NA |
| 7.24 | Sledges with cords for pulling | NA |
| 7.25 | Flying toys | NA |
| 7.25.1 | Flying toys | NA |
| 7.25.2 | Remote controlled flying toys | NA |
| 7.26 | Improvised projectiles | NA |

Note:P = Pass F = Fail NA = Not applicable NR = Not Requested

## 2. BS EN 71-2:2011 + A1:2014 SAFETY OF TOYS (FLAMMABILITY)

| Sub-clause | Requirement | Result(s) | Remark(s) |
|---|---|---|---|
| 4.1 | General | P | |
| 4.2 | Toys to be worn on the head | NA | |
| 4.3 | Toy disguise costumes and toys intended to be worn by a child in play | NA | |
| 4.4 | Toys intended to be entered by a child | P | *Note: If the material has non-identical surfaces, both sides shall be tested.* |
| 4.5 | Soft-filled toys | NA | |

**NOTE:** P = Pass F = Fail NA = Not Applicable NR = Not Requested
NT = Not Tested

## 3. EN 71-8:2018 Safety of toys. Activity toys for domestic use

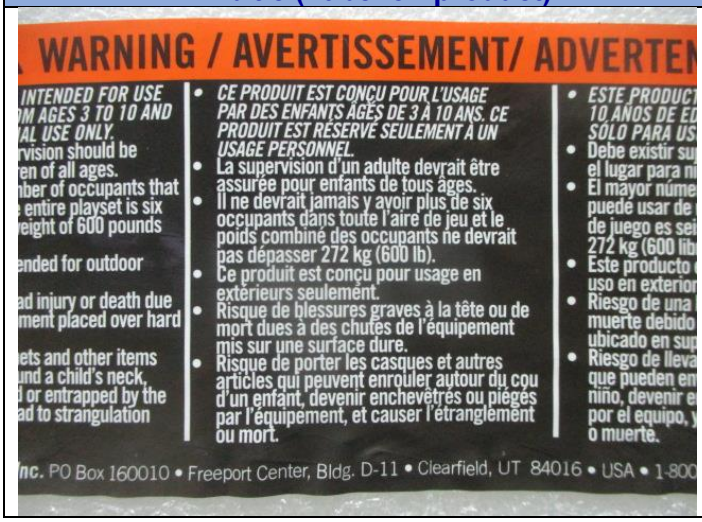
Label age grade: /
Appropriate age grade for testing: 3 to 10 years old
Overall dimension of sample: 106-1/2" x 106-1/2" x 56-1/4"
Overall weight of sample: 38.8 kg

| Subclause | Requirement | Result(s) |
|---|---|---|
| 4 | General | P |
| 4.1.1 | Assembly | P |
| 4.1.2 | Static strength | P |
| 4.1.3 | Maximum height | P |
| 4.1.4 | Corners and edges | NA |
| 4.1.5 | Protruding parts | P |
| 4.1.6 | Diameter of ropes and other means of suspension | NA |
| 4.1.7 | Water accumulation | NA |
| 4.2 | Barriers, handrails, ladder and similar means of access to activity toy | NA |
| 4.2.1 | Barriers, handrails preventing a child from falling down. | NA |
| 4.2.2 | Ladders and similar means of access to activity toys | P |
| 4.3 | Entrapment | P |
| 4.3.1 | Entrapment of head and neck | P |
| 4.3.2 | Entrapment of clothing and hair | NA |
| 4.3.3 | Entrapment of feet | P |
| 4.3.4 | Entrapment of fingers | P |
| 4.4 | Stability of activity toys other than slides, swings and activity toys with crossbeams, and see-saws. | P |
| 4.4.1 | General | P |
| 4.4.2 | Stability of activity toys with a free height of fall of 600mm or less | NA |
| 4.4.3 | Stability of activity toys with a free height of more than 600mm | P |
| 4.5 | Slides | NA |
| 4.5.2 | Stability of slides | NA |
| 4.5.3 | Retaining slides for slides | NA |
| 4.5.4 | Starting, sliding and run-out sections on slides | NA |
| 4.6 | Swings | NA |
| 4.6.1 | Stability of swings and other activity toys with crossbeams | NA |
| 4.6.1.1 | General | NA |

| Subclause | Requirement | Result(s) |
|---|---|---|
| 4.6.1.2 | Swings and other activity toys with crossbeams more than 1200mm over the ground | NA |
| 4.6.1.3 | Swings and other activity toys with crossbeams 1200 mm or less above the ground | NA |
| 4.6.2 | Static strength of crossbeams, swing devices and suspension connectors | NA |
| 4.6.3 | Swings intended for children under 36 months | NA |
| 4.6.4 | Minimum clearance between adjacent swing elements, and adjacent structures | NA |
| 4.6.5 | Lateral stability of swing elements | NA |
| 4.6.6 | Minimum clearance between swing elements and the ground | NA |
| 4.6.7 | Suspension connectors and swing devices | NA |
| 4.6.8 | Impact, geometry and design of swing elements | NA |
| 4.6.8.1 | General | NA |
| 4.6.8.2 | Impact form swing elements | NA |
| 4.6.8.3 | Geometry and design of swing elements | NA |
| 4.6.8.4 | Falling protection of swings with double seats | NA |
| 4.7 | See-saws | NA |
| 4.7.1 | Stability of see-saws | NA |
| 4.7.2 | Seat/stand height | NA |
| 4.7.3 | Restraint of motion | NA |
| 4.7.4 | Pinching and crushing of fingers and toes | NA |
| 4.7.5 | Hand supports | NA |
| 4.8 | Carousels and rocking activity toys | NA |
| 4.9 | Paddling pools | NA |

**NOTE:** P = Pass F = Fail NA = Not Applicable NR = Not Requested
NT = Not Tested

## EXHIBIT(S):

| Exhibit 1 (Sample view) | Exhibit 2 (Sample view) |
|---|---|
|  |  |
| **Exhibit 3 (Label on product)** | **Exhibit 4 (Label on product)** |
|   |   |
| **Exhibit 5 (Label on product)** | **Exhibit 6 (Label on product)** |
|   |   |

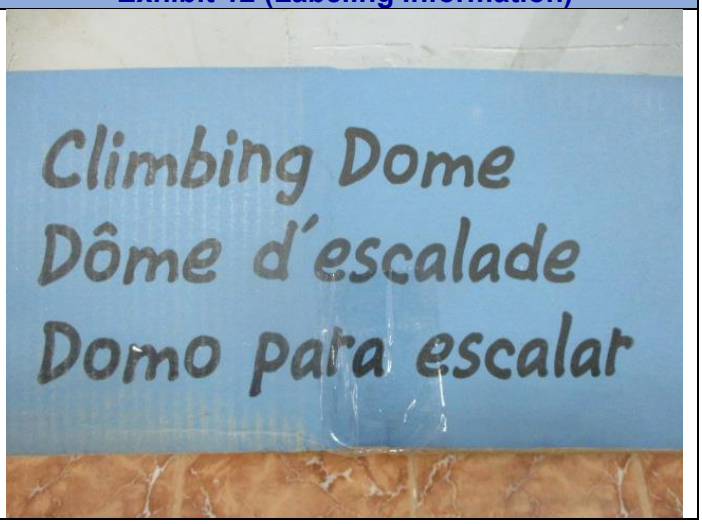
| Exhibit 7 (Label on product) | Exhibit 8 (Label on product) |
|---|---|
|  |  |
| **Exhibit 9 (Label on product)** | **Exhibit 10 (Packaging)** |
|  |  |
| **Exhibit 11 (Packaging)** | **Exhibit 12 (Labeling information)** |
|  |  |

**Exhibit 13 (Labeling information)**

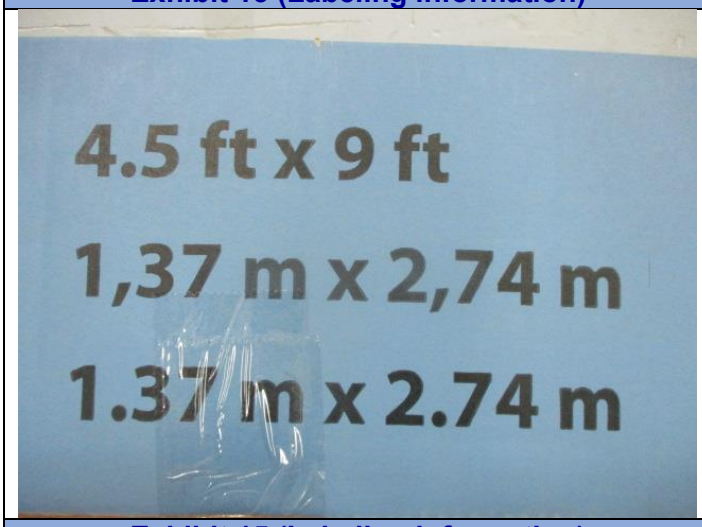



**Exhibit 14 (Labeling information)**

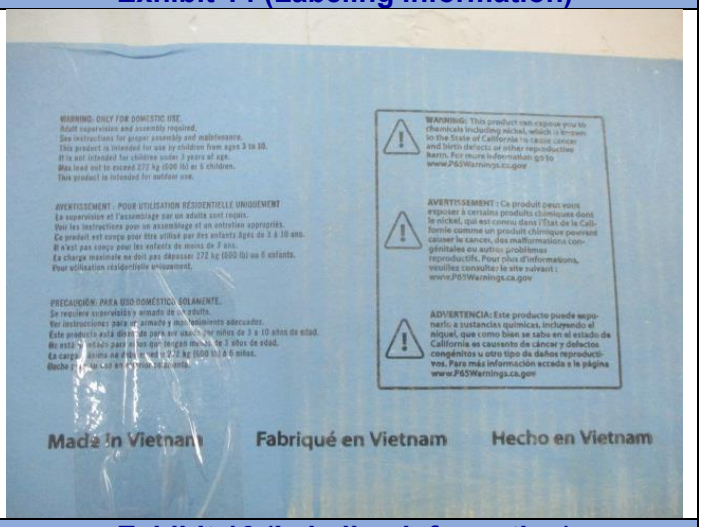



**Exhibit 15 (Labeling information)**

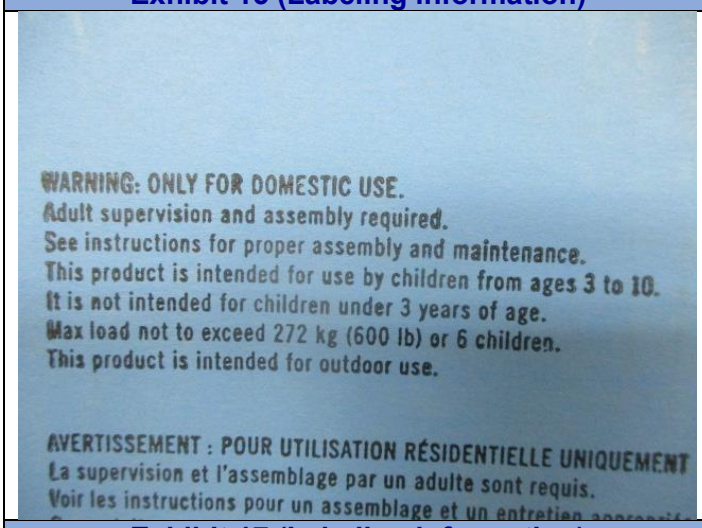



**Exhibit 16 (Labeling information)**

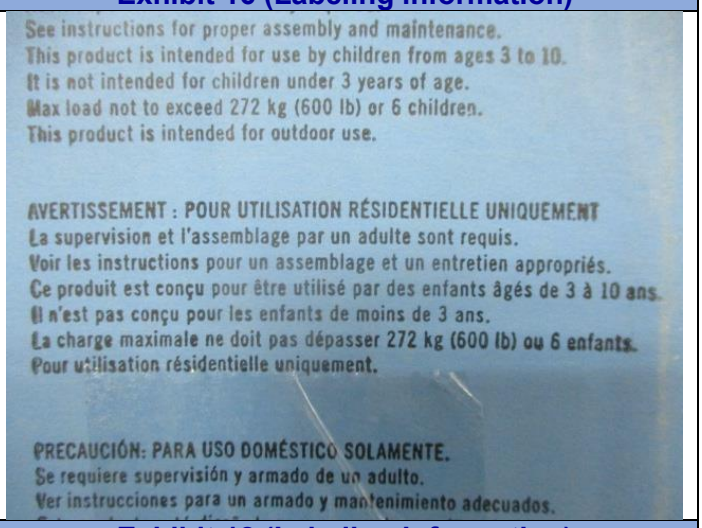



**Exhibit 17 (Labeling information)**

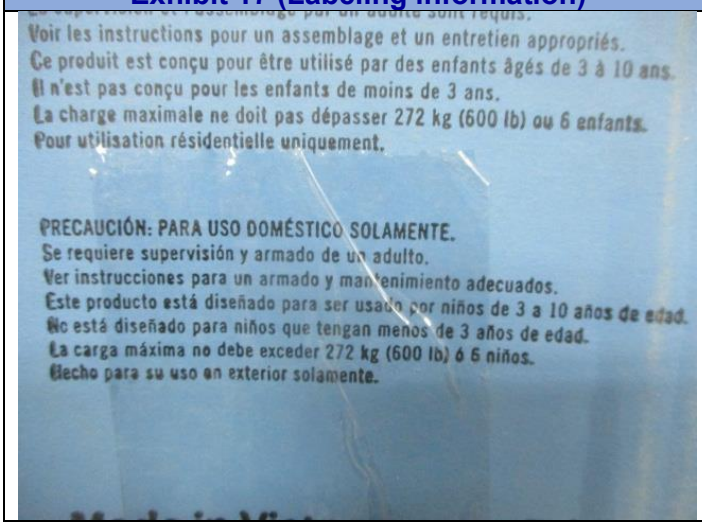
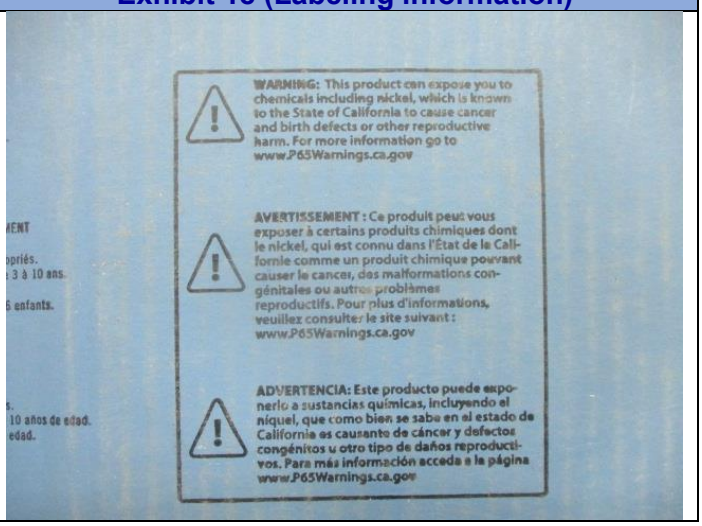
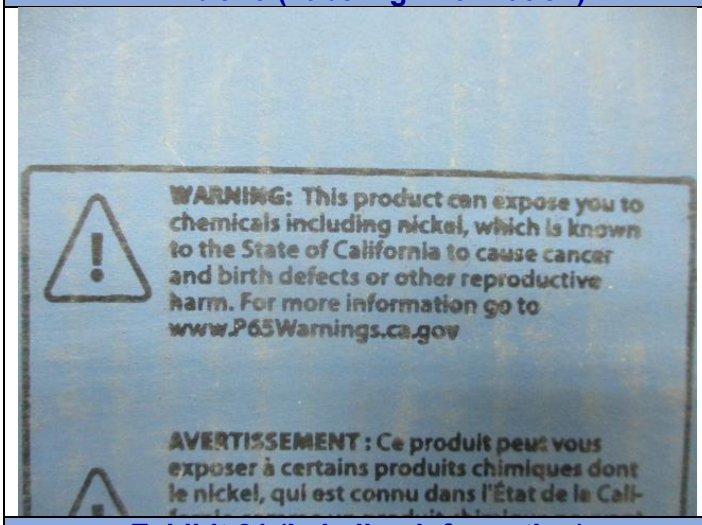
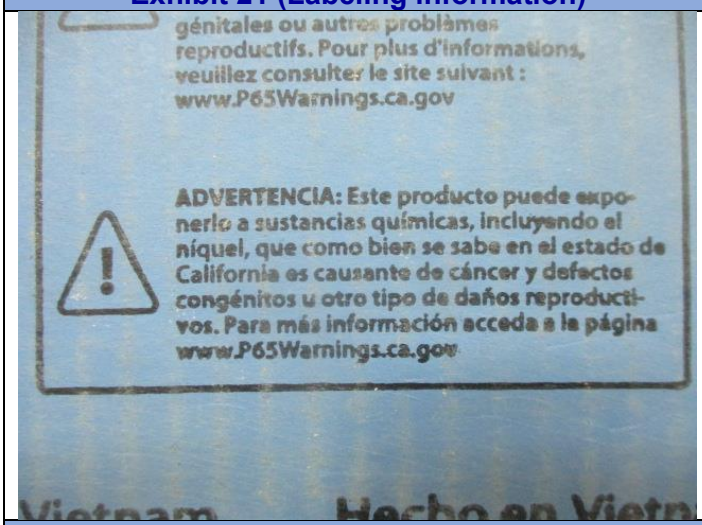
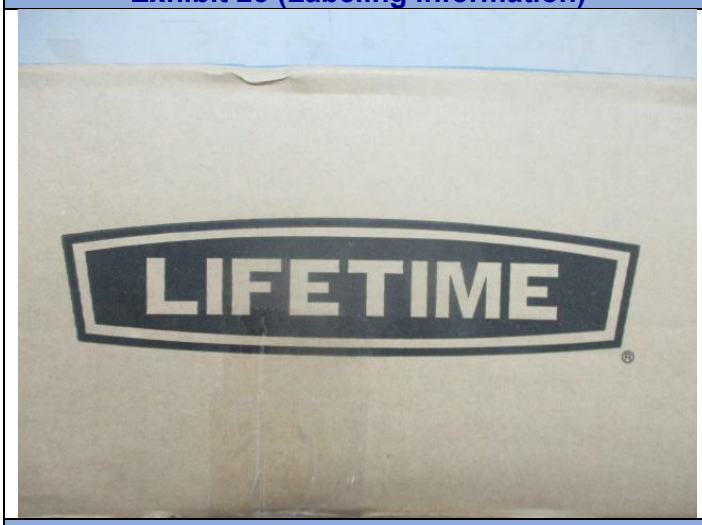
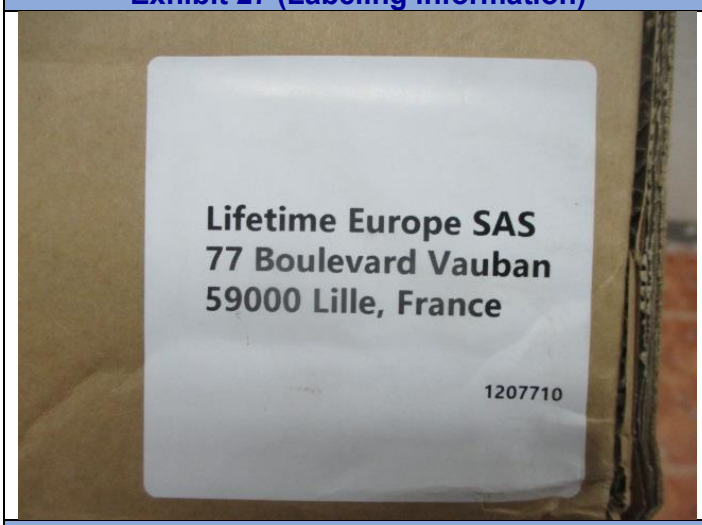
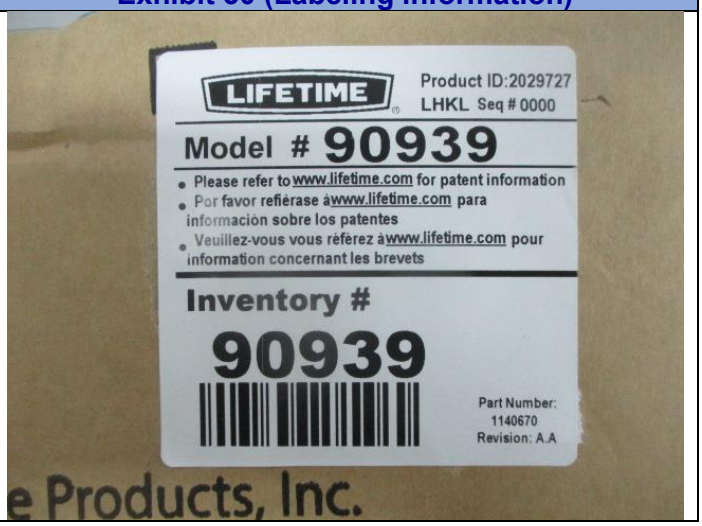
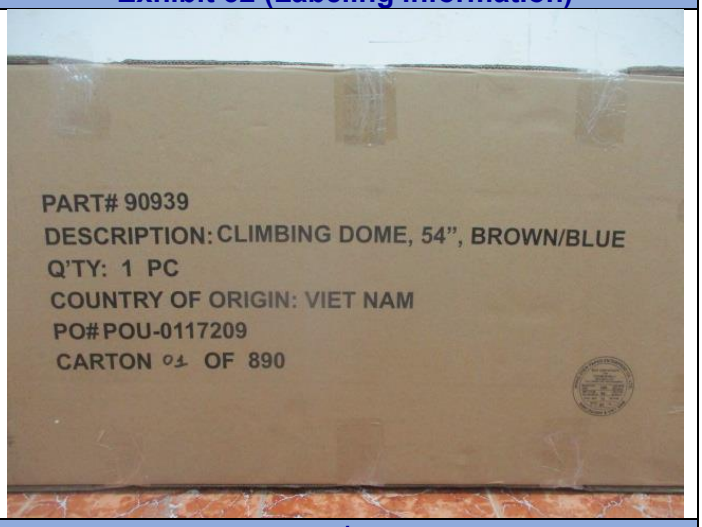
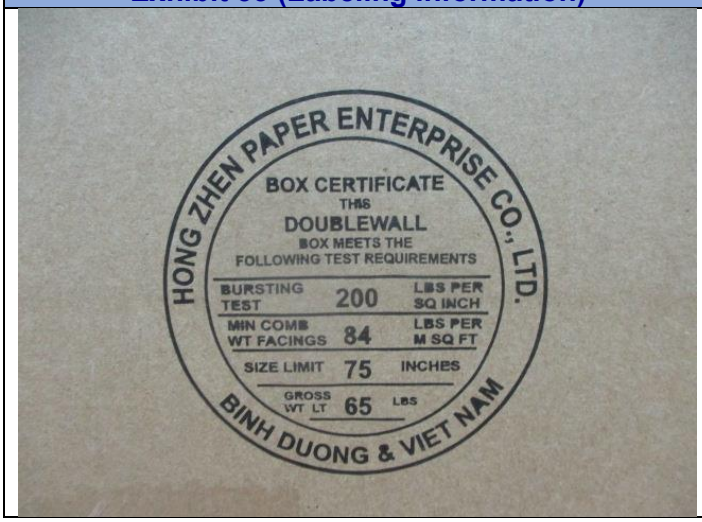



**Exhibit 18 (Labeling information)**



| Exhibit 19 (Labeling information) | Exhibit 20 (Labeling information) |
|---|---|
|  |  |
| **Exhibit 21 (Labeling information)** | **Exhibit 22 (Labeling information)** |
|  |  |
| **Exhibit 23 (Labeling information)** | **Exhibit 24 (Labeling information)** |
|  |  |

| Exhibit 25 (Labeling information) | Exhibit 26 (Labeling information) |
|---|---|
|  |  |
| **Exhibit 27 (Labeling information)** | **Exhibit 28 (Labeling information)** |
|  |  |
| **Exhibit 29 (Labeling information)** | **Exhibit 30 (Labeling information)** |
|  |  |

| Exhibit 31 (Labeling information) | Exhibit 32 (Labeling information) |
|---|---|
|  |  |
| **Exhibit 33 (Labeling information)** | **/** |
|  | / |

**NOTE:**

**If there is question or concern regarding the above results, please contact the appropriate lab person below:**

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