# Product environmental attributes – THE ECO DECLARATION

**The declaration may be published only when all rows and/or fields marked with an * are filled-in (n.a. for not applicable).**
**Additional information regarding each item may be found under P14.**

| | | |
|---|---|---|
| **Brand *** | Think | **Logo** |
| **Company name *** | ***Lenovo*** | |
| **Contact information *** | *Lenovo Global Environmental Affairs*<br>*Alvin L Carter*<br>*1009 Think Place*<br>***Building 2 / 5J3***<br>***Morrisville, North Carolina 27560***<br>alcarter@lenovo.com | |
| **Internet site *** | http://www.lenovo.com/social_responsibility/us/en/environment.html | |
| **Additional information** | | |

| **The company declares (based on product specification or test results based obtained from sample testing), that the product conforms to the statements given in this declaration.** | |
|---|---|
| **Type of product *** | ***Display*** |
| **Commercial name *** | ***LT2223dwC*** |
| **Model number *** | ***60A9*** |
| **Issue date *** | ***2013.09.09*** |
| **Intended market *** | ☒ **Global** ☐ **Europe** ☐ **Asia, Pacific & Japan** ☐ **Americas** ☐ **Other** |
| **Additional information** | |

**This is an uncontrolled copy when in printed form. Please refer to the contact information for the latest version.**

| **Quality Control** | | **Requirement met** | |
|---|---|---|---|
| Item | | Yes | No |
| QC1 * | The company enforces an internal quality control scheme to ensure the correctness of this eco declaration | ☒ | ☐ |
| QC2 * | The company is a member of an eco declaration system that enforces regular independent quality control such as organized by IT-Företagen (see www.itecodeclaration.org). | ☒ | ☐ |

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|---|---|---|---|
| **Model number *** | *60A9* | | |
| **Issue date *** | *2013.09.09* | **Logo** | lenovo |

| **Product environmental attributes - Legal requirements** | | **Requirement met** | | |
|---|---|---|---|---|
| Item | | Yes | No | n.a. |
| **P1** | **Hazardous substances and preparations** | | | |
| P1.1* | Products do not contain more than; 0.1% lead, 0.01% cadmium, 0.1% mercury, 0.1% hexavalent chromium, 0.1% polybrominated biphenyls (PBB) or 0.1% polybrominated diphenyl ethers (PBDE). (See legal reference and Note B1) | ☒ | ☐ | |
| P1.2* | Products do not contain Asbestos (see legal reference).<br>Comment: Legal reference has no maximum concentration value. | ☒ | ☐ | |
| P1.3* | Products do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), hydrobromofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrachloride, 1,1,1-trichloroethane, methyl bromide (see legal reference). Comment: Legal reference has no maximum concentration values. | ☒ | ☐ | |
| P1.4* | Products do not contain more than; 0.005% polychlorinated biphenyl (PCB), 0.005% polychlorinated terphenyl (PCT) in preparations (see legal reference). | ☒ | ☐ | |
| P1.5* | Products do not contain more than 0.1% short chain chloroparaffins (SCCP) with 10-13 carbon atoms in the chain containing at least 48% per mass of chlorine in the SCCP (see legal reference). | ☒ | ☐ | |
| P1.6* | Textile and leather parts with direct skin contact do not contain Tri-(2,3,-dibromopropyl)-phosphate (TRIS), Tris-(aziridinyl)-phosphineoxide (TEPA), polybrominated biphenyl (PBB) (see legal reference).<br>Comment: Legal reference has no maximum concentration values. | ☐ | ☐ | ☒ |
| P1.7* | Textile and leather parts with direct skin contact do not contain more than 0.003% Azo colorants that split aromatic amines. (See legal reference and Note B1) | ☐ | ☐ | ☒ |
| P1.8* | Wooden parts do not contain arsenic and chromium as a wood preservation treatment as well as pentachlorophenol and derivatives (see legal reference).<br>Comment: Legal reference has no maximum concentration values. | ☐ | ☐ | ☒ |
| P1.9* | Parts with direct and prolonged skin contact do not release nickel in concentrations above 0.5 microgram/cm$^2$/week (see legal reference).<br>Comment: Max limit in legal reference when tested according to EN1811:1998. | ☒ | ☐ | ☐ |
| P1.10* | REACH Article 33 information about substances in articles is available at (add URL or mail contact):<br>*http://www.lenovo.com/social_responsibility/us/en/ThinkGreen_products.html#environment* | ☒ | ☐ | ☐ |
| **P2** | **Batteries** | | | |
| P2.1* | If the product contains a battery or an accumulator, it is labeled with the disposal symbol and if it contains more than 0.0005% of mercury (for button cells only) by weight, or more than 0.004% of lead, it shall be marked with the chemical symbol for the metal concerned, Hg or Pb. Information on proper disposal is provided in user manual. (See legal reference) | ☐ | ☐ | ☒ |
| P2.2* | Button cells used in the product do not contain more than 2% by weight of mercury. Other batteries or accumulators do not contain more than 0.0005% of mercury or 0.002% of cadmium. (See legal reference) | ☐ | ☐ | ☒ |
| P2.3* | Batteries and accumulators are easily removable by either users or service providers (as dependent on the design of the product). Exception: Batteries that are permanently installed for safety, performance, medical or data integrity reasons do not have to be “easily removable”. (See legal reference) | ☐ | ☐ | ☒ |
| **P3** | **Safety, EMC connection to the telephone network and labeling** | | | |
| P3.1* | The product complies with legally required safety standards as specified (see legal reference). | ☒ | ☐ | ☐ |
| P3.2* | The product complies with legally required standards for electromagnetic compatibility (see legal reference). | ☒ | ☐ | ☐ |
| P3.3* | If product is intended for connection to a public telecom network or contains a radio transmitter, it complies with legally required standards for radio and telecommunication devices (see legal reference). | ☒ | ☐ | ☐ |
| P3.4* | The product is labeled to show conformance with applicable legal requirements (see legal reference). | ☒ | ☐ | ☐ |
| **P4** | **Consumable materials** | | | |
| P4.1* | If a photo conductor (drum, belt etc.) is used in the product, it does not contain cadmium max 0.01% (see legal reference and Note B1). | ☐ | ☐ | ☒ |
| P4.2* | If ink/toner is used in the product, it does not contain cadmium max 0.1% by weight (see legal reference). | ☐ | ☐ | ☒ |
| P4.3* | If the ink/toner formulation/preparation is classified as hazardous according to applicable regulations, the product/packaging is adequately labeled and a Safety Data Sheet (SDS) in accordance with these requirements is available (see legal reference). | ☐ | ☐ | ☒ |
| **P5** | **Product packaging** | | | |
| P5.1* | Packaging and packaging components do not contain more than 0.01% lead, mercury, cadmium and hexavalent chromium by weight of these together. | ☒ | ☐ | |
| P5.2* | Plastic packaging material is marked according to ISO 11469 referring ISO 1043 (see legal reference). | ☒ | ☐ | ☐ |
| P5.3* | The product packaging material is free from ozone depleting substances as specified in the Montreal Protocol (see legal reference).<br>Comment: Legal reference has no maximum concentration values. | ☒ | ☐ | ☐ |

*Note B1: Restriction applies to the homogeneous material, unless other specified and expressed in weight %.*

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|---|---|---|---|
| **Model number *** | ***60A9*** | | |
| **Issue date *** | ***2013.09.09*** | **Logo** | lenovo |

| **Product environmental attributes - Market requirements - Environmental conscious design** | | **Requirement met** | | |
|---|---|---|---|---|
| Item | *=mandatory to fill in. Additional information regarding each item may be found under P14. | Yes | No | n.a. |
| **P6** | **Treatment information** | | | |
| P6.1* | Information for recyclers/treatment facilities is available (see legal reference). | ☒ | ☐ | ☐ |
| **P7** | **Design**<br>**Disassembly, recycling** | | | |
| P7.1* | Parts that have to be treated separately are easily separable | ☒ | ☐ | ☐ |
| P7.2* | Plastic materials in covers/housing have no surface coating. | ☐ | ☒ | ☐ |
| P7.3* | Plastic parts >100g consist of one material or of easily separable materials. | ☒ | ☐ | ☐ |
| P7.4* | Plastic parts >25g have material codes according to ISO 11469 referring ISO 1043. | ☒ | ☐ | ☐ |
| P7.5 | Plastic parts are free from metal inlays or have inlays that can be removed with commonly available tools. | ☒ | ☐ | ☐ |
| P7.6* | Labels are easily separable. (This requirement does not apply to safety/regulatory labels). | ☒ | ☐ | ☐ |
| | **Product lifetime** | | | |
| P7.7* | Upgrading can be done e.g. with processor, memory, cards or drives | ☒ | ☐ | ☐ |
| P7.8* | Upgrading can be done using commonly available tools | ☒ | ☐ | ☐ |
| P7.9. | Spare parts are available after end of production for: ***5*** years | | | ☐ |
| P7.10 | Service is available after end of production for: ***5*** years | | | ☐ |
| | **Material and substance requirements** | | | |
| P7.11* | Product cover/housing material type:<br>Material type: ***ABS*** Material type: ***PC*** Material type: | | | |
| P7.12 | Electrical cable insulation materials of power cables are PVC free. | ☐ | ☒ | ☐ |
| P7.13 | Electrical cable insulation materials of signal cables are PVC free | ☐ | ☒ | ☐ |
| P7.14 | All cover/housing plastic parts >25g are free from chlorine and bromine. | ☒ | ☐ | ☐ |
| P7.15 | All printed circuit boards (without components) >25g are halogen free. as defined in IEC61249-2-21. (See Note B2) | ☐ | ☒ | ☐ |
| P7.16 | Flame retarded plastic parts >25g in covers / housings are marked according ISO 1043-4:<br>Marking: | ☒ | ☐ | ☐ |
| P7.17 | Alt. 1<br>Chemical specifications of flame retardants in printed circuit boards >25g (without components):<br>TBBPA (additive) ☐, TBBPA (reactive) ☒, Other; chemical name: , CAS #:<br><br>Alt. 2<br>Chemical specifications of flame retardants in printed circuit boards (without components) >25g according ISO 1043-4: ***Brominated Epoxy Resin See P14*** | ☐<br><br>☐ | ☐<br><br>☐ | ☐<br><br>☐ |
| P7.18 | Alt. 1<br>Flame retarded plastic parts >25g contain the following flame retardant substances/preparations in concentrations above 0.1%:<br>Comment: No legal limits exist, this is a market requirement.<br>Provide a list of all used flame retardants including MSDS for each flame retardant. The list must contain complete chemical name, CAS number and supplier.<br>1. Chemical name: , CAS #: , Supplier:<br>2. Chemical name: , CAS #: , Supplier:<br>3. Chemical name: , CAS #: , Supplier:<br>Alt. 2<br>Chemical specifications of flame retardants in plastic parts >25g according ISO 1043-4: | ☐<br><br><br><br><br><br>☒ | ☐<br><br><br><br><br><br>☐ | ☐<br><br><br><br><br><br>☐ |
| P7.19 | Plastic parts >25g are free from flame retardant substances/ preparations above 0.1% classified as R45, R40, R46, R48, R50, R51, R53, R60, R61 and any combination of these (See Note B3) | ☒ | ☐ | ☐ |
| P7.20 | Of total plastic parts' weight >25g, recycled material content is 32%. | | | |
| P7.21 | Of total plastic parts' weight >25g, biobased material content is ***0***%. | | | |
| P7.22 | Light sources are free from mercury | ☒ | ☐ | ☐ |
| **P8** | **Batteries** | | | |
| P8.1* | Battery chemical composition: | | | ☒ |
| P8.2 | Batteries meet the requirements of the following voluntary program/s: | | | ☒ |

*Note B2: IEC61249-2--21 has maximum limits for chlorine and bromine but does not address fluorine, iodine and astatine which are included in the group of halogens.*

*Note B3: 'Starting from January 2009, Risk phrases can be replaced by Hazard phrases according to the Globally Harmonized System (GHS), mandatory by December 2010.*

| Model number * | 60A9 | | |
|---|---|---|---|
| Issue date * | | Logo | lenovo |

| Product environmental attributes - Market requirements (continued) | | | | | Requirement met |
|---|---|---|---|---|---|
| Item | | | | | Yes No n.a. |
| **P9** | **Energy consumption** | | | | |
| 9.1 | For the product the following power levels or energy consumptions are reported: ***See P14***<br>The product is shipped w/ WOL Enabled. | | | | ☒ ☐ ☐ |
| Energy mode * | Power level at **100** V AC | Power level at **115** V AC | Power level at **230** V AC | Reference / Standard for energy modes and test method * | ☐ |
| ***Peak (On-max)*** | ***123.8***W | ***122.4***W | ***121.1***W | ***Full load*** | ☐ |
| **Category A** | | | | | |
| ***Idle State - WOL Enabled*** | ***14.64***W | ***14.54*** W | ***14.62***W | ***Use for Energy Star V5 registration($P_{idle}$)*** | ☐ |
| ***Sleep (S3) - WOL Enabled*** | ***0.19*** W | ***0.20***W | ***0. 24***W | ***Use for Energy Star V5 registration($P_{sleep}$)*** | ☐ |
| ***Sleep (S3) - WOL Disabled*** | ***0.19*** W | ***0.20*** W | ***0.24*** W | ***Reference*** | ☐ |
| ***Off (S5) - WOL Enabled*** | ***0.16*** W | ***0.16*** W | ***0.21*** W | ***Use for Energy Star V5 registration($P_{off}$)*** | ☐ |
| ***Off (S5) - WOL Disabled*** | ***0.16*** W | ***0.16*** W | ***0.21*** W | ***Use for EuP*** | ☐ |
| **Category B** | | | | | |
| ***Idle State - WOL Enabled*** | W | W | W | ***Use for Energy Star V5 registration($P_{idle}$)*** | ☐ |
| ***Sleep (S3) - WOL Enabled*** | W | W | W | ***Use for Energy Star V5 registration($P_{sleep}$)*** | ☐ |
| ***Sleep (S3) - WOL Disabled*** | W | W | W | ***Reference*** | ☐ |
| ***Off (S5) - WOL Enabled*** | W | W | W | ***Use for Energy Star V5 registration($P_{off}$)*** | ☐ |
| ***Off (S5) - WOL Disabled*** | W | W | W | ***Use for EuP*** | ☐ |
| EPS No-load<br>(External power supply / charger plugged in the wall outlet but disconnected from the product.) | W | W | W | | ☐ |
| TEC<br>Typical Energy Consumption | kWh/week | kWh/week | kWh/week | | ☒ |
| $E_{TEC}$ *<br>Annual Energy Consumption | ***77.5*** kWh/year | ***77*** kWh/year | ***77.6*** kWh/year | ***$E_{TEC}$ = (8760/1000) x ($P_{off}$ x 0.6 + $P_{sleep}$ x 0.1 + $P_{idle}$ x 0.3)*** | ☐ |
| | ***$P_{off}$: Off Mode(S5) - WOL Enabled; $P_{sleep}$: Sleep Mode(S3) - WOL Enabled; $P_{idle}$: Idle State - WOL Enabled*** | | | | |
| Display resolution : ***1920 x 1080*** Megapixels | | | | | ☐ |
| Print Speed : Images per minute | | | | | ☒ |
| Default time to enter energy save mode: ***10*** seconds | | | | | ☐ |
| P9.2* | Information about the energy save function is provided with the product. | | | | ☒ ☐ ☐ |
| P9.3* | The product meets the energy requirements of the following voluntary program/s:<br>ENERGY STAR® version: ***Version 5.0 dated July 1, 2009*** Product category: ***Display*** | | | | ☒ ☐ ☐ |
| | Others specify: | | | | ☐ ☐ ☒ |
| **P10** | **Emissions** | | | | |
| | **Noise emission** – Declared according to ISO 9296 | | | | |

| P10.1 | Mode | Mode description | Declared A-weighted sound power level $L_{WAd}$ (B) | Declared A-weighted sound pressure level $L_{pAm}$ (dB) | | |
|---|---|---|---|---|---|---|
| | | | | Operator position ☐ | Bystander positions ☐ (only if product is not operator attended) | |
| | | | | Desktop ☐ or Desk side ☐ | | |
| | Idle | * ***HDD: Idle*** | | | | ☒ |
| | Operation | * ***HDD: Operating*** | | | | ☒ |
| | Other mode | | | | | |
| | Measured according to: ☒ ISO7779 ☐ ECMA-74 ☐ Other (only if not covered by ECMA-74 with $L_{pAm}$ measurement distance m) | | | | | |
| P10.2 | The product meets the acoustic noise requirements of the following voluntary program/s: | | | | | ☐ ☐ ☒ |

| | | | |
|---|---|---|---|
| **Model number** * | ***60A9*** | | |
| **Issue date** * | | **Logo** | lenovo |

| **Product environmental attributes - Market requirements (continued)** | | **Requirement met** | | |
|---|---|---|---|---|
| Item | | Yes | No | n.a. |
| | **Chemical emissions from printing products** | | | |
| P10.3* | Test performed according to ECMA-328 (ISO/IEC 28360) standard ☐, other specify: | ☐ | ☐ | ☒ |
| P10.4 | Typical emission rate (print phase) is (mg/h):<br>Dust Ozone Styrene Benzene TVOC | | | ☒ |
| P10.5 | Chemical emission requirements of the following voluntary program/s are met for :<br>Dust ☐ Ozone ☐ Styrene ☐ Benzene ☐ TVOC ☐ | ☐ | ☐ | ☒ |
| | **Electromagnetic emissions** | | | |
| P10.6 | Computer display meets the requirement for low frequency electromagnetic fields of the following voluntary program/s: ***TCO 6.0*** | ☒ | ☐ | ☐ |
| **P11** | **Consumable materials for printing products** | | | |
| P11.1* | A Safety Data Sheet (SDS) is available for the ink/toner preparation, even if not legally required (see P4.3). | ☐ | ☐ | ☒ |
| P11.2* | Paper containing post-consumer recycled fibers can be used, provided that it meets the requirements of EN12281. | ☐ | ☐ | ☒ |
| P11.3* | 2-sided (duplex) printing/copying is an integrated product function. | ☐ | ☐ | ☒ |
| **P12** | **Ergonomics for computing products** | | | |
| P12.1* | The display meets the ergonomic requirements of ISO 9241-307 for visual display technologies. | ☒ | ☐ | ☐ |
| P12.2* | The physical input device meets the requirements of ISO 9995 and ISO 9241-410. | ☒ | ☐ | ☐ |
| **P13** | **Packaging and documentation** | | | |
| P13.1* | Product packaging material type(s): ***EPS*** weight (kg): ***0.37***<br>Product packaging material type(s): ***Carton*** weight (kg): ***0.87***<br>Product packaging material type(s): ***PE Bag*** weight (kg): ***0.045*** | | | |
| P13.2* | Product plastic packaging is free from PVC. | ☒ | ☐ | ☐ |
| P13.3* | Specify media for user and product documentation (tick box):<br>Electronic ☒, Paper ☒, Other ☐ | | | ☐ |
| P13.4* | For paper user and product documentation, please specify contained percentage of post-consumer recycled fiber: ***85%*** *(Japan only 70%)* | | | ☐ |
| **P14** | **Additional information (See Note B4)** | | | |
| | | | | |
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| | | | | |

*Note B4: Additional lines may be inserted to declare further items, by positioning the cursor at the far right of the row and hitting the <Enter> key.*

## Legal references Europe Annex B

| Reference | Declaration item |
|---|---|
| 2002/95/EC (ROHS Directive) | P1.1, P4.1 |
| REACH, Annex XVII | P1.6, P1.8, P4.2 |
| REACH, Annex XVII | P1.4 |
| REACH, Annex XVII | P1.2 |
| REACH, Annex XVII | P1.7 |
| REACH, Annex XVII | P1.9 |
| Regulation (EC) No. 2037/2000, 2038/2000, 2039/2000 | P1.3 |
| Norwegian regulation relating to restrictions on the use of certain dangerous chemicals 20.12.2002 | P1.5 |
| 2006/66/EC (Battery and accumulators Directive) | P2.1, P2.2, P2,3, P3.4, P8.1 |
| 2006/95/EC (Low Voltage Directive) | P3.1, 3.4 |
| 2004/108/EEC (New EMC Directive) | P3.2, 3.4 |
| 1999/5/EC (R&TTE Directive) | P3.3, 3.4 |
| “REACH" Regulation (1907/2006), annex VII | P1.10 |
| (EC) No.1272/2008 regulation on classification, labeling and packaging (CLP) | P4.3 |
| REACH article 31, annex II | P4.3 |
| 2004/12/EC (Directive on packaging and packaging waste) | P5.1 |
| (97/129/EC) (Commission Decision on Identification System for Packaging Materials | P5.2 |
| 2037/2000/EC Regulation on Substances that Deplete the Ozone Layer | P5.3 |
| 2002/96/EC (WEEE directive) | P3.4, P6.1 |
| (EC) No.1272/2008 regulation on classification, labeling and packaging (CLP) | P7.19 |