

## 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 *                | Lenovo  | 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 | lenovo |
| Internet site *        | http://www.lenovo.com/social_responsibility/us/en/environment   | t.html |
| Additional information |   |        |

| The company declares (based on product specification or test results based obtained from sample testing), that the produc conforms to the statements given in this declaration. |  |  |  |  |
|---|--|--|--|--|
| Type of product *   | Notebook PC  |  |  |  |
| Commercial name *   | Lenovo IdeaPad U310 Touch                                    |  |  |  |
| Model number *  | 20222;6890   |  |  |  |
| Issue date *  | 013-1-24   |  |  |  |
| Intended market *   | 🔀 Global 📃 Europe 📃 Asia, Pacific & Japan 📃 Americas 📃 Other |  |  |  |
| Additional information  |  |  |  |  |

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| Quality Control |  |             | nt met |
|-----------------|--|-------------|--------|
| Item            |  | Yes         | No     |
| QC1 *           | The company enforces an internal quality control scheme to ensure the correctness of this eco declaration  | $\boxtimes$ |        |
| QC2 *           | The company is a member of an eco declaration system that enforces regular independent quality contro<br>such as organized by IT-Företagen (see www.itecodeclaration.org). | ol 🔀        |        |

| Model number * | Lenovo IdeaPad U310 Touch |      |        |
|----------------|---------------------------|------|--------|
| Issue date *   | 2013-1-24                 | Logo | lenovo |

|                    | environmental attributes - Legal requirements   | Require     |    |             |
|--------------------|---|-------------|----|-------------|
| Item               |   | Yes         | No | n.a.        |
| <b>P1</b><br>P1.1* | Hazardous substances and preparations<br>Products do not contain more than; 0.1% lead, 0.01% cadmium, 0.1% mercury, 0.1% hexavalent<br>chromium, 0.1% polybrominated biphenyls (PBB) or 0.1% polybrominated diphenyl ethers (PBDE). (See  |             |    |             |
| P1.2*              | legal reference and Note B1)<br>Products do not contain Asbestos (see legal reference).   |             |    |             |
| D4 0*              | Comment: Legal reference has no maximum concentration value.  |             |    |             |
| P1.3*              | Products do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC),<br>hydrobromofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrachloride, 1,1,1-<br>trichloroethane, methyl bromide (see legal reference). Comment: Legal reference has no maximum<br>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).   | $\square$   |    |             |
| 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).  | $\boxtimes$ |    |             |
| P1.6*              | Textile and leather parts with direct skin contact do not contain Tri-(2,3,-dibromopropyl)-phosphate (TRIS),<br>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)  |             |    | $\square$   |
| P1.8*              | Wooden parts do not contain arsenic and chromium as a wood preservation treatment as well as<br>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 <sup>2</sup> /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)  | $\boxtimes$ |    |             |
| 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, medica 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).   | $\square$   |    |             |
| P3.2*              | The product complies with legally required standards for electromagnetic compatibility (see legal<br>reference).  | $\boxtimes$ |    |             |
| P3.3*              | If product is intended for connection to a public telecom network or contains a radio transmitter, it complies<br>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).  | $\boxtimes$ |    |             |
| 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).   |             |    | $\boxtimes$ |
| P4.2*              | If ink/toner is used in the product, it does not contain cadmium max 0.1% by weight (see legal reference).  |             |    | $\boxtimes$ |
| 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).   | $\square$   |    |             |
| P5.3*              | The product packaging material is free from ozone depleting substances as specified in the Montrea<br>Protocol (see legal reference).   | ıl 🖂        |    |             |

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

| Model n  | umber *   | Lenovo IdeaPad U310 Touch  |             |           |      |  |  |
|----------|---|--|-------------|-----------|------|--|--|
| Issue da | ate *   | 2013-1-24 Logo   | lend        | ovo       | 2    |  |  |
| Produc   | t environ   | mental attributes - Market requirements - Environmental conscious design   | Require     | mont      | mot  |  |  |
| Item     |   | atory to fill in. Additional information regarding each item may be found under P14.   | Yes         | No        | n.a. |  |  |
| P6       |   | nt information   | 100         | 110       | mai  |  |  |
| P6.1*    | Informati   | on for recyclers/treatment facilities is available (see legal reference).  | $\boxtimes$ |           |      |  |  |
| P7       | Design  | mbly, recycling  |             | <u> </u>  |      |  |  |
| P7.1*    |   | t have to be treated separately are easily separable   |             |           |      |  |  |
| P7.2*    |   | naterials in covers/housing have no surface coating.   |             | H         | ⊢⊢   |  |  |
| P7.3*    | Plastic parts >100g consist of one material or of easily separable materials. |  |             |           |      |  |  |
| P7.4*    |   | arts >25g have material codes according to ISO 11469 referring ISO 1043.   |             | H         | H    |  |  |
| P7.5     |   | arts are free from metal inlays or have inlays that can be removed with commonly available tools.  |             | H         | ⊢⊢   |  |  |
| P7.6*    | -   | re easily separable. (This requirement does not apply to safety/regulatory labels).  |             | ⊢⊢        | ⊢⊢   |  |  |
| 11.0     | Product   |  |             |           |      |  |  |
| P7.7*    |   | g can be done e.g. with processor, memory, cards or drives   |             |           |      |  |  |
| P7.8*    |   | g can be done using commonly available tools   |             | H         | H    |  |  |
| P7.9.    |   | Ints are available after end of production for: 5 years  |             |           | H    |  |  |
| P7.10    |   | s available after end of production for: 5 years   |             |           | ⊢⊢   |  |  |
|          |   | and substance requirements   |             |           |      |  |  |
| P7.11*   |   | cover/housing material type:   |             |           |      |  |  |
|          |   | type: <b>PC+ABS-FR(40)</b> Material type: Material type:   |             |           |      |  |  |
| P7.12    | Electrica   | I cable insulation materials of power cables are PVC free.   |             | $\square$ |      |  |  |
| P7.13    | Electrica   | I cable insulation materials of signal cables are PVC free   |             |           |      |  |  |
| P7.14    | All cover   | /housing plastic parts >25g are free from chlorine and bromine.  |             | Ē         | Ē    |  |  |
| P7.15    |   | d circuit boards (without components) >25g are halogen free. as defined in IEC61249-2-21. (S   | ee          |           |      |  |  |
| P7.16    | Flame re<br>Marking:  | tarded plastic parts >25g in covers / housings are marked according ISO 1043-4:<br><i>FR(40)</i>   | $\square$   |           |      |  |  |
| P7.17    | TBBPA (<br>Alt. 2<br>Chemica  | I specifications of flame retardants in printed circuit boards >25g (without components):<br>additive), TBBPA (reactive) ⊠, Other; chemical name: , CAS #:<br>I specifications of flame retardants in printed circuit boards (without components) >25g according<br>3-4: <b>Brominated Epoxy Resin See P14</b> |             |           |      |  |  |
| P7.18    | Alt. 1<br>Flame r   | etarded plastic parts >25g contain the following flame retardant substances/preparations ations above 0.1%:  | in 🗌        |           |      |  |  |
|          | Commer<br>Provide<br>complete<br>1. Chem                                      | nt: No legal limits exist, this is a market requirement.<br>a list of all used flame retardants including MSDS for each flame retardant. The list must conta<br>e chemical name, CAS number and supplier.<br>ical name: , CAS #: , Supplier:<br>ical name: , CAS #: , Supplier:                                | ain         |           |      |  |  |
|          | Alt. 2  | ical name: , CAS #: , Supplier:<br>I specifications of flame retardants in plastic parts >25g according ISO 1043-4:  |             |           |      |  |  |
| P7.19    | Plastic p   | arts >25g are free from flame retardant substances/ preparations above 0.1% classified as R45, 6, R48, R50, R51, R53, R60, R61 and any combination of these (See Note B3)  |             |           |      |  |  |
| P7.20    |   | lastic parts' weight >25g, recycled material content is 0.5%.  |             |           |      |  |  |
| P7.21    |   | lastic parts' weight >25g, biobased material content is 0%.  |             |           |      |  |  |
| P7.22    | Light sou   | Irces are free from mercury  | $\square$   |           |      |  |  |
| P8       | Batterie  |  |             |           |      |  |  |
| P8.1*    |   | hemical composition: Lithium Ion/Lithium Manganese Dioxide   |             |           |      |  |  |
| P8.2     | Batteries   | meet the requirements of the following voluntary program/s: US RBRC  |             |           |      |  |  |

Annex B of ECMA-370 4<sup>th</sup> edition, June 2009

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 nun   | <sup>ber*</sup> Lenovo IdeaPad U310 Touch  |                         |   |  |   |   |   |           |
|---|--|-------------------------|---|--|---|---|---|-----------|
| Issue date  | *  | 2013-1-2                | 4 Logo lenovo   |  |   |   |   |           |
|   |  |                         |   |  |   |   |   |           |
|   | Product environmental attributes - Market requirements (continued) Requirement met   |                         |   |  |   |   |   |           |
|   | Item Yes No n.a.   |                         |   |  |   |   |   |           |
| <b>P9</b><br>9.1  |  | consumpt                |   |  | motiona ara raparta                       | d: Coo P14  |   |           |
| 9.1   | 9.1 For the product the following power levels or energy consumptions are reported: See P14 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<br>and test method * | d for energy modes  |   |           |
| Peak (On-max)   |  |                         | <b>40</b> W   | <b>40</b> W  | <b>40</b> W                               | Full load   |   |           |
| Category  | y A  |                         | I   |  |   |   |   |           |
| Idle State  | - WOL Er   | abled                   | 5.1W  | 5.2W   | 5.3 W                                     | Use for Energy Star                                       | /5 registration(P <sub>idle</sub> )           |           |
| Sleep (S3)  | - WOL E  | nabled                  | 0.51 W  | 0.52 W   | 0.51W                                     | Use for Energy Star                                       | /5 registration(P <sub>sleep</sub> )          |           |
| Sleep (S3)  | - WOL D  | isabled                 | 0.51 W  | 0.50 W   | 0.52 W                                    | Reference   |   |           |
| Off (S5) - V  | NOL Ena  | bled                    | 0.23 W  | 0.23 W   | 0.29 W                                    | Use for Energy Star                                       | /5 registration(P <sub>off</sub> )            |           |
| Off (S5) - V  | NOL Disa   | abled                   | 0.24W   | 0.24 W   | 0.29 W                                    | Use for EuP   |   |           |
| EPS No-loa<br>(External p<br>charger plu<br>outlet but d<br>the product | ower sup<br>Igged in th  | ne wall                 | <i>0.079</i> W  | 0.081 W  | 0.104 W                                   |   |   |           |
| TEC<br>Typical Ene  | ergy Cons  | sumption                | kWh/week  | kWh/week   | kWh/week                                  |   |   |           |
| ETEC *<br>Annual Ene  | ergy Cons  | umption                 | 15.067 kWh/year   | 15.321 kWh/year  | 15.908 kWh/year                           | $E_{TEC} = (8760/1000) \times 0.1 + P_{idle} \times 0.3)$ | $(P_{off} \times 0.6 + P_{sleep} \times 0.6)$ |           |
|   |  |                         | Poff: Off Mode(S5) - V  | VOL Enabled; P <sub>sleep</sub> : S  | Sleep Mode(S3) - WOL                      | Enabled; P <sub>idle</sub> : Idle State                   | - WOL Enabled                                 |           |
| Display res   | olution  | 1280*800                | Megapixels  |  |   |   |   |           |
| Print Speed   | d  | :                       | Images per minu   | te   |   |   |   | $\square$ |
| Default time  | e to enter   | energy sa               | we mode: 25 minute  | S  |   |   |   |           |
| P9.2*   | Informat   | ion about f             | he energy save fund   | tion is provided with  | the product.                              |   |   |           |
| P9.3*   |  |                         |   |  |   |   |   |           |
| P10   | Emissio  |                         | Declared according  | to ISO 9296  |   |   |   |           |
| P10.1   |  |                         | Declared<br>A-weighted<br>sound power<br>level <i>L<sub>WAd</sub></i> (B) | Declared A-<br>sound pressure le<br>Operator position 🔀<br>Desktop 🔀<br>or Desk side 🗌 |   |   |   |           |
|   | Idle *   |                         | HDD: Idle   |  | * 2.77                                    | 24.   |   |           |
|   | Operatio   |                         | HDD: Operating  |  | * 2.92                                    | 27.   | 6   |           |
|   | Other me   | ode                     |   |  |   |   |   |           |
|   | Measure  | d accordir              | ng to: 🔀 ISO7779 [  | ECMA-74  |   |   |   |           |
| D10.2   | <b>T</b> 1   | hard a star             | Other   |  |   | h L <sub>pAm</sub> measurement dis                        | stance m)                                     |           |
| P10.2   | The product meets the acoustic noise requirements of the following voluntary program/s:  |                         |   |  |   |   |   |           |

| Model nu | umber *                                     | Lenovo IdeaPad U310 Touch   |                          |                        |
|----------|---|---|--------------------------|------------------------|
| Issue da | te *  | 2013-1-24 Logo  | leno                     | VO                     |
| Product  | t environr                                  | nental attributes - Market requirements (continued)   | Require                  | ement me               |
| Item     |   |   | Yes                      | No n.a                 |
|          | Chemic                                      | al emissions from printing products   |                          |                        |
| P10.3*   | Test per                                    | formed according to ECMA-328 (ISO/IEC 28360) standard 🗌, other specify:   |                          |                        |
| P10.4    | • •   | emission rate (print phase) is (mg/h): Dust Ozone Styrene Benzene TVOC  |                          | $\ge$                  |
| P10.5    | Chemica<br>[                                | al emission requirements of the following voluntary program/s are met for :<br>DustOzoneStyreneBenzeneTVOC  |                          |                        |
|          | Electron                                    | nagnetic emissions  |                          |                        |
| P10.6    |   | er display meets the requirement for low frequency electromagnetic fields of the following voluntary<br>/s: MPR-II  | $\square$                |                        |
| P11      |   | able 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 c<br>EN1228                           | ontaining post-consumer recycled fibers can be used, provided that it meets the requirements 1.   | of 🗌                     |                        |
| P11.3*   | 2-sided                                     | duplex) printing/copying is an integrated product function.   |                          |                        |
| P12      | Ergono                                      | nics for computing products   |                          |                        |
| P12.1*   | The disp                                    | lay meets the ergonomic requirements of ISO 9241-307 for visual display technologies.   | $\boxtimes$              |                        |
| P12.2*   | The phy                                     | sical input device meets the requirements of ISO 9995 and ISO 9241-410.   | $\square$                |                        |
| P13      | Packagi                                     | ng and documentation  |                          |                        |
| P13.1*   | Product<br>Product                          | packaging material type(s): <i>Corrugated Carton</i> weight (kg): <i>0.378</i><br>packaging material type(s): <i>Polyethylene Cushions</i> weight (kg): <i>0.058</i><br>packaging material type(s): <i>Others</i> weight (kg): <i>0.230</i> |                          |                        |
| P13.2*   |   | plastic packaging is free from PVC.   | $\boxtimes$              |                        |
| P13.3*   |   | nedia for user and product documentation (tick box):<br>ic 🔀, Paper 🔀, Other 🗌  |                          |                        |
| P13.4*   |   | er user and product documentation, please specify contained percentage of post-consumer recycle % (Japan only 70%)  | d                        |                        |
| P14      |   | nal information (See Note B4)   |                          |                        |
|          | informat<br>knowled<br>provided<br>informat |   | sed on su<br>tion. The i | pplier's<br>nformation |
| P7.17    |   | does not contain free TBBPA in printed circuit boards(without components)>25g.  |                          |                        |
| P9       | See Ene<br>http://de                        | ergy Star Qualified (insert appropriate Product type; i.e. Desktop, Notebook, etc.) for the late.<br>ownloads.energystar.gov/bi/qplist/laptops_prod_list.xls (insert appropriate web url)   | st informa               | tion:                  |

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<br>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                        |