

### 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 *                | ThinkPad   | Logo           |
|------------------------|--|----------------|
| Company name *         | Lenovo   |                |
| Contact information *  | Lenovo Global Environmental Affairs                            |                |
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| Internet site *        | http://www.lenovo.com/social_responsibility/us/en/environment  | .html          |
| Additional information | The latest version of this document can be found at            |                |
|                        | http://www.lenovo.com/social_responsibility/us/en/datasheets_i | notebooks.html |

| 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 *  | Notebook   |  |  |  |  |
| Commercial name *  | ThinkPad 11e 3rd Gen;ThinkPad Yoga 11e 3rd Gen               |  |  |  |  |
| Model number *   | 20G9, 20GB, 20G8, 20GA                                       |  |  |  |  |
| Issue date *   | 2016-01-15   |  |  |  |  |
| 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  | Requireme | nt 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). | ol 🔀      |        |

| Model number * | 20G9, 20GB, 20G8, 20GA |      |        |
|----------------|------------------------|------|--------|
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| Product | roduct environmental attributes - Legal requirements  |             |                   |             |  |  |  |  |
|---------|---|-------------|-------------------|-------------|--|--|--|--|
| 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).  Comment: Legal reference has no maximum concentration value.   | $\boxtimes$ |                   |             |  |  |  |  |
| P1.3*   | Products do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC),  | $\square$   |                   |             |  |  |  |  |
|         | 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).   | $\boxtimes$ |                   |             |  |  |  |  |
| 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),  |             |                   | $\square$   |  |  |  |  |
| 1 1.0   | Tris-(aziridinyl)-phosphineoxide (TEPA), polybrominated biphenyl (PBB) (see legal reference).  Comment: Legal reference has no maximum concentration values.  |             | ш                 |             |  |  |  |  |
| P1.7*   | Textile and leather parts with direct skin contact do not contain more than 0.003% Azo colorants that split   |             | $\overline{\Box}$ | $\square$   |  |  |  |  |
|         | aromatic amines. (See legal reference and Note B1)  | ш           | ш                 |             |  |  |  |  |
| P1.8*   | Wooden parts do not contain arsenic and chromium as a wood preservation treatment as well as  |             |                   | $\boxtimes$ |  |  |  |  |
|         | pentachlorophenol and derivatives (see legal reference).  | _           |                   |             |  |  |  |  |
| D4.0*   | 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/cm²/week (see legal reference).  | $\boxtimes$ | Ш                 |             |  |  |  |  |
|         | 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):  |             | $\overline{\Box}$ |             |  |  |  |  |
|         | http://www.lenovo.com/social_responsibility/us/en/materials.html  |             | ш                 | ш           |  |  |  |  |
| P2      | Batteries   |             |                   |             |  |  |  |  |
| P2.1*   | If the product contains a battery or an accumulator, it is labeled with the disposal symbol and if it contains  | $\square$   | П                 |             |  |  |  |  |
|         | 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  |             |                   |             |  |  |  |  |
| P2.2*   | 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   | $\boxtimes$ |                   |             |  |  |  |  |
|         | 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).   | $\boxtimes$ |                   |             |  |  |  |  |
| P3.2*   | The product complies with legally required standards for electromagnetic compatibility (see legal reference).   | $\boxtimes$ |                   |             |  |  |  |  |
| 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).  | $\boxtimes$ |                   |             |  |  |  |  |
| 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).   |             |                   |             |  |  |  |  |
| P4.2*   | If ink/toner is used in the product, it does not contain cadmium max 0.1% by weight (see legal reference).  |             |                   | $\square$   |  |  |  |  |
| P4.3*   | If the ink/toner formulation/preparation is classified as hazardous according to applicable regulations, the  | 一百          | Ħ                 | X           |  |  |  |  |
|         | 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 Montreal Protocol  |             | $\overline{H}$    | $\dashv$    |  |  |  |  |
| 1 0.0   | (see legal reference).  |             | ш                 |             |  |  |  |  |
|         | Comment: Legal reference has no maximum concentration values.   |             |                   |             |  |  |  |  |

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

| Model number * | 20G9, 20GB, 20G8, 20GA |      |        |  |
|----------------|------------------------|------|--------|--|
| Issue date *   | 2016-01-15             | Logo | Lenovo |  |

| **mandatory to fill in. Additional information regarding each item may be found under P14.   | Product | environmental attributes - Market requirements - Environmental conscious design   | Require     | ment                   | met           |
|--|---------|---|-------------|------------------------|---------------|
| Information for recyclers/treatment facilities is available (see legal reference).   | Item    |   | Yes         | No                     | n.a.          |
| Disassembly, recycling   |         |   |             |                        |               |
| 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 >250 parts are surface as a coating in State parts >250 parts are free from metal inlays or have inlays that can be removed with commonly available tools.  P7.6* 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).  P7.6* Upgrading can be done e.g. with processor, memory, cards or drives  P7.8* Upgrading can be done e.g. with processor, memory, cards or drives  P7.9* Upgrading can be done e.g. with processor, memory, cards or drives  P7.9* Spare parts are available after end of production for: \$ years  P7.9* Service is available after end of production for: \$ years  P7.10* Service is available after end of production for: \$ years  P7.11* Product over/housing material type:  Material and substance requirements  P7.12* Product over/housing material type:  Material type: PC+48S+TPU  P7.12* Electrical cable insulation materials of signal 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* Planne retarded plastic parts >25g in covers / housings are marked according ISO 1043-4:  Note B2.  P7.16* Planne retarded plastic parts >25g in covers / housings are marked according ISO 1043-4:  Chemical specifications of fiame retardants in printed circuit boards (without components) >25g according ISO 1043-4:  P7.18* Alt. 1  Prominal aname: , CAS #:  Alt. 2  Chemical aname: , CAS #:  Alt. 3  Chemical aname: , CAS #:  Alt. 4  PR.10* Planne retarded plastic parts >25g contain the following flame retardant substances/preparations in concentrations a | P6.1*   | Information for recyclers/treatment facilities is available (see legal reference).  |             |                        |               |
| P7.3*   Plastic materials in covers/housing have no surface coating.   P7.3*   Plastic parts >250 goonsist of one material or of easily separable materials.   P7.4*   Plastic parts >250 pave 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).   P7.6*   P7.7*   P1.5*      | P7      |   |             |                        |               |
| P7.4°   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.   P1.5°   Plastic parts >25g have material codes according to ISO 11469 referring ISO 1043.   P7.6°   Labels are easily separable. (This requirement does not apply to safety/regulatory labels).   P7.6°   Labels are easily separable. (This requirement does not apply to safety/regulatory labels).   P7.7°   Upgrading can be done e.g. with processor, memory, cards or drives   P7.7°   Upgrading can be done using commonly available tools   P7.9°   Spare parts are available after end of production for: 5 years   P7.10°   Sparce is available after end of production for: 5 years   P7.10°   Sparce is available after end of production for: 5 years   P7.11°   P7.10°   P7.      | P7.1*   | Parts that have to be treated separately are easily separable   | $\boxtimes$ |                        |               |
| P7.4*   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 > 25g have material codes according to ISO 11469 referring ISO 1043.   P7.6*   Product lifestime   P7.7*   Plastic parts are fere 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).   P7.7*   P7     | P7.2*   | Plastic materials in covers/housing have no surface coating.  |             | $\overline{\boxtimes}$ | Ħ             |
| P7.4   Plastic parts ≥25g have material codes according to ISO 11469 referring ISO 1043.   □   | P7.3*   | Plastic parts >100g consist of one material or of easily separable materials.   |             | Ħ                      | Ħ             |
| P7.6   Plastic parts are free from metal inlays or have inlays that can be removed with commonly available tools.  | P7.4*   |   |             | Ħ                      | Ħ             |
| P7.6°   Labels are easily separable. (This requirement does not apply to safety/regulatory labels).   Product lifetime   |         |   |             | 旹                      | 一一            |
| 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   P7.11* Product cover/housing material type:   Material and substance requirements   P7.11* Product cover/housing material type:   Material type: PC+ABS   Material type: PC+ABS+TPU   Material type: PC-ABS+TPU   Material type: PC-ABS-TPU   Material     |         |   |             | Ħ                      | Ħ             |
| P7.8° 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:  P7.12* Product cover/housing material type:  Material type: PC+4BS  P7.12 Electrical cable insulation materials of bower 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:  Marking: >PC+ABS-TD15FR(40)<; >PC+ABS-FR(40)<; >PC-GF40FR(40)  P7.17 Alt. 1  Chemical specifications of flame retardants in printed circuit boards >25g (without components):  TBBPA (additive)   | P7.7*   |   |             | $\Box$                 |               |
| P7.9. Spare pats are available after end of production for: 5 years    P7.10   Service is available after end of production for: 5 years   | P7.8*   |   |             | 旹                      | 〒             |
| P7.10   Service is available after end of production for: 5 years   Material and substance requirements  |         |   |             |                        | ∺             |
| Material and substance requirements  |         |   |             |                        | ∺             |
| P7.11* Product cover/housing material type: Material type: PC+ABS  | 1 7.10  |   |             |                        |               |
| Material type: PC+ABS   Material type: PC+ABS+TPU    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:   □ □    Marking: *PC+ABS-TD15FR(40)<; *PC+ABS-FR(40)<; *PC+ABS-FR(40)<; *PC+AFF(40)<; *PC+AFF(40    | P7 11*  |   |             |                        |               |
| P7.12   Electrical cable insulation materials of power cables are PVC free.  | 7       | Material type: PC+ABS Material type: PC+40%GF+TPU Material type: PC   |             |                        |               |
| 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:     Marking: >PC+ABS-TD15FR(40)<; >PC+ABS-FR(40)<  | D7 12   | •   |             |                        | $\overline{}$ |
| 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:    Marking: >PC+ABS-TD15FR(40)<; >PC+ABS-FR(40)<; >PC-GF40FR(40)<   P7.17   |         | <u> </u>  |             | <u> </u>               | 井             |
| 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:     Marking; >PC+ABS-TD15FR(40)<; >PC+ABS-FR(40)<; >PC-GF40FR(40)<  P7.17 Alt. 1 Chemical specifications of flame retardants in printed circuit boards >25g (without components):     TBBPA (additive)  |         |   |             | 뷰                      | 井             |
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| Marking: >PC+ABS-TD15FR(40)<; >PC+ABS-FR(40)<; >PC-GF40FR(40)<  P7.17 Alt. 1 Chemical specifications of flame retardants in printed circuit boards >25g (without components): TBBPA (additive)   | P7.15   | Note B2)  | e           |                        |               |
| Chemical specifications of flame retardants in printed circuit boards >25g (without components):  TBBPA (additive) , TBBPA (reactive) , Other; chemical name: , CAS #:  Alt. 2 Chemical specifications of flame retardants in printed circuit boards (without components) >25g according ISO 1043-4: **Brominated Epoxy Resin See P14*  P7.18 Alt. 1 Flame retarded plastic parts >25g contain the following flame retardant substances/preparations in concentrations above 0.1%:  Comment: No legal limits exist, this is a market requirement.  1. Chemical name: , CAS #:  | P7.16   |   |             |                        |               |
| Chemical specifications of flame retardants in printed circuit boards (without components) >25g according ISO 1043-4: Brominated Epoxy Resin See P14  P7.18 Alt. 1 Flame retarded plastic parts >25g contain the following flame retardant substances/preparations in concentrations above 0.1%: Comment: No legal limits exist, this is a market requirement.  1. Chemical name: , CAS #: 2. Chemical name: , CAS #: 3. Chemical name: , CAS #: Alt. 2 Chemical specifications of flame retardants in plastic parts >25g according ISO 1043-4: FR(40)  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 7.8%.  P7.21 Of total plastic parts' weight >25g, biobased material content is 0%.  P7.22 Light sources are free from mercury If mercury is used specify: Number of lamps: and max. mercury content per lamp: mg  P8 Batteries  Batteries   | P7.17   | Alt. 1 Chemical specifications of flame retardants in printed circuit boards >25g (without components):   |             |                        |               |
| Flame retarded plastic parts >25g contain the following flame retardant substances/preparations in concentrations above 0.1%:  Comment: No legal limits exist, this is a market requirement.  1. Chemical name: , CAS #: 2. Chemical name: , CAS #: 3. Chemical name: , CAS #: Alt. 2 Chemical specifications of flame retardants in plastic parts >25g according ISO 1043-4: FR(40)  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 7.8%.  P7.21 Of total plastic parts' weight >25g, biobased material content is 0%.  P7.22 Light sources are free from mercury If mercury is used specify: Number of lamps: and max. mercury content per lamp: mg  P8 Batteries  P8.1* Battery chemical composition: Lithium Ion/Lithium Manganese Dioxide   |         | Chemical specifications of flame retardants in printed circuit boards (without components) >25g according ISO 1043-4: <i>Brominated Epoxy Resin See P14</i> |             |                        |               |
| 1. Chemical name: , CAS #: 2. Chemical name: , CAS #: 3. Chemical name: , CAS #: Alt. 2 Chemical specifications of flame retardants in plastic parts >25g according ISO 1043-4: FR(40)  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 7.8%.  P7.21 Of total plastic parts' weight >25g, biobased material content is 0%.  P7.22 Light sources are free from mercury If mercury is used specify: Number of lamps: and max. mercury content per lamp: mg  P8 Batteries  P8.1* Battery chemical composition: Lithium Ion/Lithium Manganese Dioxide   | P7.18   | Flame retarded plastic parts >25g contain the following flame retardant substances/preparations i   | n 🔲         |                        |               |
| 2. Chemical name: , CAS #: 3. Chemical name: , CAS #: Alt. 2 Chemical specifications of flame retardants in plastic parts >25g according ISO 1043-4: FR(40)  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 7.8%.  P7.21 Of total plastic parts' weight >25g, biobased material content is 0%.  P7.22 Light sources are free from mercury If mercury is used specify: Number of lamps: and max. mercury content per lamp: mg  P8 Batteries  P8.1* Battery chemical composition: Lithium Ion/Lithium Manganese Dioxide  |         | Comment: No legal limits exist, this is a market requirement.   |             |                        |               |
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| Alt. 2 Chemical specifications of flame retardants in plastic parts >25g according ISO 1043-4: FR(40)  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 7.8%.  P7.21 Of total plastic parts' weight >25g, biobased material content is 0%.  P7.22 Light sources are free from mercury If mercury is used specify: Number of lamps: and max. mercury content per lamp: mg  P8 Batteries  P8.1* Battery chemical composition: Lithium Ion/Lithium Manganese Dioxide  |         |   |             |                        |               |
| Chemical specifications of flame retardants in plastic parts >25g according ISO 1043-4:  FR(40)  P1.19 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 7.8%.  P7.21 Of total plastic parts' weight >25g, biobased material content is 0%.  P7.22 Light sources are free from mercury If mercury is used specify: Number of lamps: and max. mercury content per lamp: mg  P8 Batteries  P8.1* Battery chemical composition: Lithium Ion/Lithium Manganese Dioxide  |         | •   |             |                        |               |
| 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 7.8%.  P7.21 Of total plastic parts' weight >25g, biobased material content is 0%.  P7.22 Light sources are free from mercury If mercury is used specify: Number of lamps: and max. mercury content per lamp: mg  P8 Batteries  P8.1* Battery chemical composition: Lithium lon/Lithium Manganese Dioxide   |         | Chemical specifications of flame retardants in plastic parts >25g according ISO 1043-4:   | $\square$   |                        |               |
| 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 7.8%.  P7.21 Of total plastic parts' weight >25g, biobased material content is 0%.  P7.22 Light sources are free from mercury  If mercury is used specify: Number of lamps: and max. mercury content per lamp: mg  P8 Batteries  P8.1* Battery chemical composition: Lithium Ion/Lithium Manganese Dioxide  | P7 10   | . ,   |             | +                      | ∺             |
| P7.21 Of total plastic parts' weight >25g, biobased material content is 0%.  P7.22 Light sources are free from mercury If mercury is used specify: Number of lamps: and max. mercury content per lamp: mg  P8 Batteries  P8.1* Battery chemical composition: Lithium Ion/Lithium Manganese Dioxide   |         | R40, R46, R48, R50, R51, R53, R60, R61 and any combination of these (See Note B3)   |             | Ш                      |               |
| P7.22 Light sources are free from mercury If mercury is used specify: Number of lamps: and max. mercury content per lamp: mg  P8 Batteries  P8.1* Battery chemical composition: Lithium Ion/Lithium Manganese Dioxide  |         |   |             |                        |               |
| If mercury is used specify: Number of lamps: and max. mercury content per lamp: mg  P8 Batteries  P8.1* Battery chemical composition: Lithium Ion/Lithium Manganese Dioxide  |         |   |             |                        |               |
| P8 Batteries P8.1* Battery chemical composition: Lithium Ion/Lithium Manganese Dioxide   | P7.22   |   | $\boxtimes$ |                        |               |
| P8.1* Battery chemical composition: Lithium Ion/Lithium Manganese Dioxide  | P8      |   |             |                        |               |
| ·  |         |   |             |                        |               |
|  | P8.2    | Batteries meet the requirements of the following voluntary program/s: US Call2Recycle, add EPBA, JBRC   |             |                        | 一一            |

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 * | 20G9, 20GB, 20G8, 20GA |      |         |  |
|----------------|------------------------|------|---------|--|
| Issue date *   | 2016-01-15             | Logo | Lenovo. |  |

| Product environmental attributes - Market requirements (continued)  Requirement met                                |  |        |  |                                   |  |   |  |      |
|--|--|--------|--|-----------------------------------|--|---|--|------|
| Item Ene   | ray concurs  | otion  |  |                                   |  |   | Yes No   | n.a. |
| P9 Energy consumption  9.1 For the product the following power levels or energy consumptions are reported: See P14 |  |        |  |                                   |  |   |  |      |
|  | THE PROGREET IN  |        |  | Power level at                    |  |   |  |      |
| Energy mode *  |  | _      | ower level at<br>I <b>00</b> V AC              | 115 V AC                          | 230 V AC                               |   | eference / Standard for energy modes and test ethod *  |      |
| Peak (On-max)  | 1  | 45     | W  | <b>45</b> W                       | <b>45</b> W                            | F   | ull load   |      |
| Category I1  |  |        |  |                                   |  |   |  |      |
| Short Idle State   | e - WOL Enab   | oled   | 10.308(50Hz)<br>; 9.540(60Hz)<br>W             | 9.708 W                           | 10.368 W                               | Us  | e for ENERGY STAR V6 registration (P <sub>idle</sub> )   |      |
| Long Idle State  | e - WOL Enab   | led    | 4.800(50Hz);<br>4.848(60Hz)<br>W               | 4.872 W                           | 5.064 W                                | Us  | e for ENERGY STAR V6 registration (P <sub>idle</sub> )   |      |
| Sleep (S3) - Wo  | OL Enabled   |        | 0.516(50Hz);<br>0.528(60Hz)<br>W               | 0.540 W                           | 0.564 W                                | Us  | ee for ENERGY STAR V6 registration(P <sub>sleep</sub> )  |      |
| Off (S5) - WOL   | Enabled  |        | 0.228(50Hz);<br>0.228(60Hz)<br>W               | 0.240 W                           | 0.324 W                                | Us  | se for ENERGY STAR V6 registration(P <sub>off</sub> )  |      |
| Category I2  |  |        |  |                                   |  |   |  |      |
| Short Idle State   | e - WOL Enab   | oled   | 7.824(50Hz);<br>8.292(60Hz)<br>W               | 7.788 W                           | <b>8.160</b> W                         | Us  | ee for ENERGY STAR V6 registration(P <sub>idio</sub> )   |      |
| Long Idle State  | e - WOL Enab   | led    | 5.184(Hz);<br>5.160(60Hz)<br>W                 | 5.136 W                           | 5.232 W                                | Us  | se for ENERGY STAR V6 registration(P <sub>idio</sub> )   |      |
| Sleep (S3) - W0  | OL Enabled   |        | 0.864(50Hz);<br>0.852(60Hz)<br>W               | 0.876 W                           | <b>0.936</b> W                         | Us  | e for ENERGY STAR V6 registration (P <sub>sleep</sub> )  |      |
| Off (S5) - WOL   | Enabled  |        | 0.636(50Hz);<br>0.636(60Hz)<br>W               | 0.648 W                           | <b>0.804</b> W                         | Us  | ee for ENERGY STAR V6 registration(P <sub>off</sub> )  |      |
| EPS No-load<br>(External power<br>plugged in the v<br>disconnected from  | vall outlet but  | •      | W  | W                                 | W                                      |   |  |      |
| PTEC * Typical Energy  | Consumption  |        | W  | W                                 | W                                      |   |  |      |
| TEC * Typical Energy   | Consumption  |        | kWh/week                                       | kWh/week                          | kWh/week                               |   |  |      |
| ETEC * Annual Energy   | Consumption  |        | 11:<br>33.38(50Hz);<br>31.44(60Hz)<br>kWh/year | <i>I1:</i> 31.96 kWh/year         | I1: 34.12<br>kWh/year                  | $E_{TEC} = (8760/1000) \times (P_{off} \times 0.25 + P_{sleep} \times 0.35 + P_{long\_Idle} \times 0.10 + P_{short\_Idle} \times 0.30)$ |  |      |
|  |  |        | 12:<br>29.14(50Hz);<br>30.32(60Hz)<br>kWh/year | <b>12: 29.07</b> kWh/year         | 12: 30.66<br>kWh/year                  |   | $EC = (8760/1000) \times (P_{off} \times 0.25 + P_{sleep} \times 0.35)$<br>$P_{long\_ldle} \times 0.10 + P_{short\_ldle} \times 0.30)$ |      |
| <u> </u>   | <u> </u>   |        |  | 5) - WOL Enabled; I               | P <sub>sleep</sub> : Sleep Mode        | (S3)  | - WOL Enabled; P <sub>idle</sub> : Idle State - WOL Enabled  |      |
| Display resolution   | on* : <b>3.1472</b> N  | Megap  | oixels   |                                   |  |   |  |      |
| Print Speed *  | : Ir   | mages  | s per minute                                   |                                   |  |   |  |      |
| Default time to enter energy save mode: 20 minutes   |  |        |  |                                   |  |   |  |      |
| P9.2* Info   | P9.2* Information about the energy save function is provided with the product. |        |  |                                   |  |   |  |      |
| EN   | •  |        | energy requirem<br>ion: <b>Version 6.1</b>     | ents of the followin<br>Tier: Pro | ng voluntary prod<br>duct category: [1 |   | n/s:   |      |
|  | issions  |        |  |                                   |  |   |  |      |
|  |  | – Decl | lared according t                              | o ISO 9296                        |  |   |  |      |
| P10.1 Mod  | de   | Mode   | description                                    |                                   | Declared<br>A-weighted<br>sound powe   | b   | Declared A-weighted sound pressure level $L_{p{\sf Am}}$ (dB)  |      |
|  |  |        |  |                                   |  |   | Operator position 🔲  |      |

|       |   |   | level $L_{W\!Ad}(B)$ | Desktop Bystander positions or Desk side (only if product is not operator attended) |  |  |  |  |
|-------|---|---|----------------------|---|--|--|--|--|
|       | Operation   | * CPU : Operating                                   | * 3.5                | 27.3  |  |  |  |  |
|       | Idle  | * Idle  | * 3.25               | 25.0  |  |  |  |  |
|       | Measured accord   | ding to: SISO7779 ECMA-74 Other (only if not covere | d by ECMA-74 with    | h L <sub>pAm</sub> measurement distance m)  |  |  |  |  |
| P10.2 | The product meets the acoustic noise requirements of the following voluntary program/s: |   |                      |   |  |  |  |  |

| Model nu | umber *    | 20G9,       | 20GB, 2         | 20G8, 20          | <b>GA</b>      |        |               |      |         |         |      |             |  |
|----------|------------|-------------|-----------------|-------------------|----------------|--------|---------------|------|---------|---------|------|-------------|--|
| Issue da | ite *      | 2016-01-1   | 5               | -                 |                |        |               | Logo | Lenovo. |         |      |             |  |
|          |            |             |                 |                   |                |        |               |      |         |         |      |             |  |
| Product  | t environm | iental atti | ibutes - Mar    | ket requireme     | ents (contin   | ued)   |               |      |         | Require | ment | met         |  |
| Item     |            |             |                 |                   |                |        |               |      |         | Yes     | No   | n.a.        |  |
|          | Chemica    | l emission  | s from printin  | g products        |                |        |               |      |         |         |      |             |  |
| P10.3*   | Test perf  | ormed acco  | ording to ECMA  | -328 (ISO/IEC     | 28360) standa  | ard, o | ther specify: |      |         |         |      | $\boxtimes$ |  |
| P10.4    | Typical e  | mission rat | e (print phase) | is (mg/h):        |                |        |               |      |         |         |      | $\boxtimes$ |  |
|          |            | Oust        | Ozone           | Styrene           | Benzene        | )      | TVOC          |      |         |         |      |             |  |
| P10.5    | Chemica    | emission i  | equirements of  | f the following v | oluntary progr | am/s   | are met for : |      | •       |         |      |             |  |
|          | D          | ust         | Ozone           | Styrene           |                | Benzer | ne 🗌          | TVOC |         |         |      |             |  |

| Item   |   | Yes         | No | n.a.                    |
|--------|---|-------------|----|-------------------------|
|        | Chemical emissions from printing products   |             |    |                         |
| P10.3* | Test performed according to ECMA-328 (ISO/IEC 28360) standard , other specify:  |             |    | $\boxtimes$             |
| P10.4  | Typical emission rate (print phase) is (mg/h):  |             |    | $\times$                |
|        | Dust Ozone Styrene Benzene TVOC   |             |    |                         |
| P10.5  | Chemical emission requirements of the following voluntary program/s are met for :   |             |    | X                       |
|        | 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:   |             |    |                         |
| 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).  |             |    | $\boxtimes$             |
| P11.2* | Paper containing post-consumer recycled fibers can be used, provided that it meets the requirements of EN12281.   |             |    | $\boxtimes$             |
| P11.3* | 2-sided (duplex) printing/copying is an integrated product function.  |             |    | $\mathbb{X}$            |
| P12    | Ergonomics for computing products   |             |    |                         |
| P12.1* | The display meets the ergonomic requirements of ISO 9241-307 for visual display technologies.   |             |    | $\overline{\mathbf{X}}$ |
| P12.2* | The physical input device meets the requirements of ISO 9995 and ISO 9241-410.  |             |    | $\boxtimes$             |
| P13    | Packaging and documentation   |             |    |                         |
| P13.1* | Product packaging material type(s): Corrugated Cardboard weight (kg): 0.377   |             |    |                         |
|        | Product packaging material type(s): 100% Recycled Molded Pulp weight (kg): 0.110  |             |    |                         |
| P13.2* | Product packaging material type(s): <i>Others (Plastic Bag)</i> weight (kg): <i>0.011</i> Product plastic packaging is free from PVC.   | <u> </u>    |    |                         |
|        | 1 1 0 0   | $\boxtimes$ |    | $\vdash$                |
| P13.3* | Specify media for user and product documentation (tick box):  |             |    | Ш                       |
| D40.4* | Electronic , Paper , Other ,  |             |    |                         |
| P13.4* | For paper user and product documentation, please specify contained percentage of post-consumer recycled fiber: 0%   |             |    | Ш                       |
| P14    | Additional information (See Note B4)  |             |    |                         |
|        | NOTE: Supplier makes no representations, guarantees, assurances or warranties whether express or implied, re-   |             |    |                         |
|        | information contained in this document. All information provided by supplier in this document is provided based of knowledge available at the time of completion, and supplier shall have no obligation to update such information. |             |    | on                      |
|        | provided here is approximate and provided for informational purposes only. See a Lenovo Account Representation  |             |    | OH                      |
|        | information.  | . 5 . 5 . 1 |    |                         |
| P9     | See Energy Star Qualified Notebooks & Tablet Computers for the latest information:  |             |    |                         |
|        | http://www.energystar.gov/index.cfm?fuseaction=find_a_product.showProductGroup&pgw_code=CO  |             |    |                         |
|        |   |             |    |                         |

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                        |

## **Lenovo ErP Lot3 Information Sheet**

#### - PC / Notebook -

As required by COMMISSION REGULATION (EU) No 617/2013 of 26 June 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for computers and computer servers (ErP Lot3).

#### Products scope of this sheet:

Desktop computer, integrated desktop computer, and notebook computer

This document is only valid in connection with the IT Eco Declaration of the specific Product.

| Commercial name        | ThinkPad Yoga 11e 3rd Gen; ThinkPad 11e 3rd Gen | Logo      |  |
|------------------------|---|-----------|--|
| Model Number           | 20G9, 20GB, 20G8, 20GA                          | Lenovo    |  |
| Issue Date             | 2016-01-15                                      | Lei IOVO. |  |
| Additional information |   |           |  |

| (d)   | year of manufacture:  | 2016/2         |
|-------|---|----------------|
|       | ·   |                |
| (e)   | E TEC value (kWh) per ErP Lot 3 Category and capability adjustments applied when all discrete graphics can disabled and if the system is tested with switchable graphics mode with UMA driving the display: | ds (dGfx) are  |
|       | Category (according to ErP Lot 3): A Etec: 15.672   |                |
| (f)   | E TEC value (kWh) per ErP Lot 3 Category and capability adjustments applied when all discrete graphics care enabled:  | ds (dGfx) are  |
|       | Category (according to ErP Lot 3): Etec:  |                |
| (g)   | idle state power demand (Watts);  | 5.10           |
| (h)   | sleep mode power demand (Watts);  | 0.91           |
| (i)   | sleep mode with WOL enabled power demand (Watts) (where enabled);   | 0.93           |
| (j)   | off mode power demand (Watts);  | 0.28           |
| (k)   | off mode with WOL enabled power demand (Watts) (where enabled);   | 0.75           |
| (I)   | internal power supply efficiency at 10 %, 20 %, 50 % and 100 % of rated output power (if applicable):   |                |
|       | 10% 20% 50% 100% Average  |                |
| (m)   | external power supply efficiency (if applicable):   |                |
|       | Average: 45W: 87,27%,87,31%,88,83%  | 1year 750cycle |
| (p-1) | the measurement methodology used to determine information mentioned in points (I) – internal PSU efficiency: $N/A$  |                |
| (p-2) | the measurement methodology used to determine information mentioned in points (m) – external PSU efficiency:  |                |
|       | Energy-star requirement by EPA 2.0  |                |
| (p-3) | the measurement methodology used to determine information mentioned in points (o) – loadingcycles batteries:<br><i>IEC 61960 measurement methodology</i>  |                |
| (p-4) | the measurement methodology used to determine information mentioned in maximum, idle, sleep, off mode power as defined in Point P9.1 in the Product IT Eco Declaration:                                     |                |
|       | IEC 62623 measurement methodology   |                |
| (q)   | sequence of steps for achieving a stable condition with respect to power demand::   |                |
|       | IEC 62623 measurement methodology   |                |

| (r)                 | descripti   | on of how sleep          | and/or off mode w                         | as selected or programmed:  |                          |                      |  |
|---------------------|---|--------------------------|---|---|--------------------------|----------------------|--|
|                     |   |                          | Begin menu -                              | -> Power -> Select sleep or off mode                                  |                          |                      |  |
| (s)                 | sequence of events required to reach the mode where the equipment automatically changes to sleep and/or off mode:   |                          |   |   |                          |                      |  |
|                     |   |                          | Settings-> R                              | Restore default settings for this plan                                |                          |                      |  |
| (t)                 | the duration of idle state condition before the computer automatically reaches sleep mode, or another condition which does not exceed the applicable power demand requirements for sleep mode (in minutes):  20 minutes                           |                          |   |   |                          |                      |  |
| (u)                 | the length of time after a period of user inactivity in which the computer automatically reaches a power mode that has a lower power demand requirement than sleep mode (in minutes):   |                          |   |   |                          |                      |  |
| (v)                 | the length of time before the display sleep mode is set to activate after user inactivity (in minutes):  10 minutes   |                          |   |   |                          |                      |  |
| (w)                 | informati   | on on the energy         | y-saving potential                        | of power management functionality:                                    |                          |                      |  |
|                     |   |                          |   | N/A   |                          |                      |  |
| (x)                 | user info   | rmation on how           | to enable the pow                         | er management functionality:  |                          |                      |  |
|                     |   |                          |   | Refer to User Guide   |                          |                      |  |
| (z)                 | test parameters for measurements: — test voltage in V and frequency in Hz, — total harmonic distortion of the electricity supply system, — information and documentation on the instrumentation, set-up and circuits used for electrical testing: |                          |   |   |                          |                      |  |
|                     | total har   | monic distortion         | uency in Hz 230V<br>of the electricity su |   | lectrical testing        |                      |  |
|                     | Instr.  | Instrument               | Instrument                                | Range Used  | Make and Model **        |                      |  |
|                     | Code  | I.D.                     | Туре                                      | Or ***  |                          |                      |  |
|                     | 1   | 980800014                | CHROMA                                    | 100-300VAC 50-60Hz 400Hz, 5A, 500 ,                                   | 61502                    |                      |  |
|                     | 2   | 990800321                | YOKOGAWA                                  | 600V, 10A, 5KW  | WT 210                   |                      |  |
|                     | 3   | 990105548                | ISUZU                                     | 20-28 degree C<br>30-80%  | TH-27R                   |                      |  |
|                     | 4   | 710Q03R                  | CASIO                                     | Full Range  | HS-3V                    |                      |  |
|                     | 5   | 990105627                | TECPEL                                    | 0~20( m/sec)  | AVM-714                  |                      |  |
| Addition I          | Notebook  | Battery Informa          | ation:                                    |   |                          |                      |  |
| Yes                 |   | No                       | n/a Th                                    | is notebook computer is operated by batte<br>a non-professional user. | ery/ies that cannot be a | ccessed and replaced |  |
| (Battery replaceabl | <b>not</b> use<br>e)  | er (Battery replaceable) | user Th                                   | ne battery[ies] in this product c<br>emselves                         | annot be easily re       | placed by users      |  |
|                     |   |                          |   |   |                          |                      |  |
|                     |   |                          |   |   |                          |                      |  |
| Additiona           | l informat  | ion                      |   |   |                          |                      |  |
|                     |   |                          |   |   |                          |                      |  |
|                     |   | ·                        |   |   |                          |                      |  |
|                     |   |                          |   |   |                          |                      |  |
|                     |   |                          |   |   |                          |                      |  |