



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 *	Hewlett-Packard	
Company name *	Hewlett-Packard Company	
Contact information *	Hans Wendschlag http://www.hp.com/hpinfo/globalcitizenship/environment/contactemail.html	
Internet site *	http://www.hp.com/hpinfo/globalcitizenship/environment/	
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 *	Notebook PC
Commercial name *	HP ProBook 450 G2 Notebook PC
Model number *	450 G2
Issue date *	6/3/2014
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).	☒	☐

Model number *	450 G2		
Issue date *	6/3/2014	Logo	

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). Comment: Legal reference has no maximum concentration value.	☒	☐	
P1.3*	Products do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), hydrobromofluorocarbons (HBFC), hydrochlorofluorocarbons (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-(aziridiny)-phosphineoxide (TEPA), polybrominated biphenyl (PBB) (see legal reference). 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). 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). 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): http://www.hp.com/hpinfo/globalcitizenship/environment/productdata/reachdesktop-pcs.html	☒	☐	☐
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). 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 *	450 G2		
Issue date *	6/3/2014	Logo	

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				
	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: years				☒
	Material and substance requirements				
P7.11*	Product cover/housing material type: Material type: >PC+ABS-TD15 FR(40)< Material type: >PC+ABS- FR(40)< 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: Marking: >PC+ABS-TD15 FR(40)<, >PC+ABS- FR(40)<		☒	☐	☐
P7.17	Alt. 1 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: FR40		☐	☐	☐
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: >PC+ABS-TD15 FR(40)<, >PC+ABS- 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 0 %.				
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				☐
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 *	450 G2		
Issue date *	6/3/2014	Logo	

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:							
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 *			☐
ENERGY STAR® On Mode * (System Short Idle)	7.78 W	7.88 W	7.31 W	ENERGY STAR® Program Requirements for Computers: Ver. 6.0			☐
ENERGY STAR® On Mode * (System Long Idle)	6.28 W	4.88 W	5.84 W	ENERGY STAR® Program Requirements for Computers: Ver. 6.0			☐
ENERGY STAR® Low Power Sleep Mode * (S3 - Windows "Standby") With Wake On LAN (WOL) Enabled	0.92 W	0.95 W	0.95 W	ENERGY STAR® Program Requirements for Computers: Ver. 6.0			☐
ENERGY STAR® System Off/Apparent Off Mode* (ACPI S5) With Wake On LAN(WOL) Enabled (Test Unit connected to AC Mains, AC adapter connected to notebook)	0.34 W	0.34 W	0.37 W	ENERGY STAR® Program Requirements for Computers: Ver. 6.0			☐
ETEC * Annual Energy Consumption (calculated value) for each input voltage	29.50 kWh/year	28.64 kWh/year	28.05 kWh/year	ENERGY STAR® Program Requirements for Computers: Ver. 6.0			☐
Display resolution* : Megapixels							☒
Print Speed * : Images per minute							☒
Default time to enter energy save mode: minutes				ENERGY STAR® Program Requirements for Computers: Ver. 6.0			☐
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: ENERGY STAR® version: 6.0 Tier: Product category: Notebook PC 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 ☐		☐
				Desktop ☐	(only if product is not operator attended)		☐
				or Desk side ☐			☐
	Idle	* Fans on, HDD spinning (if applicable)	* 3.1	22			☐
	Operation	* Fans on, HDD spinning	* 3.1	22			☐
	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 *	450 G2		
Issue date *	6/3/2014	Logo	

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): Dust Ozone Styrene Benzene TVOC			☒
P10.5	Chemical emission requirements of the following voluntary program/s are met for : 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).	☐	☐	☒
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): PAPER/Corrugated weight (kg): 0.398 Product packaging material type(s): PLASTIC/Polyethylene low density weight (kg): 0.0181 Product packaging material type(s): PLASTIC/EPE-Expanded Polyethylene weight (kg): 0.036			
P13.2*	Product plastic packaging is free from PVC.	☒	☐	☐
P13.3*	Specify media for user and product documentation (tick box): Electronic ☒ , Paper ☐ , Other ☐			☐
P13.4*	For paper user and product documentation, please specify contained percentage of post-consumer recycled fiber: 100 %			☐
Rev. P13.5	User and product documentation do not contain chlorine bleached paper	☒	☐	☐
P14 Additional information (See Note B4)				
All sections	1. Product environmental information contained in this declaration is valid as of the date the declaration is published. Changes to external standards referenced in the IT Eco-Declaration may invalidate some information contained in this declaration over time.			
P9	1. Many PCs are offered in multiple configurations within the model family. Energy efficiency data listed in this declaration is for an ENERGY STAR® compliant configuration if offered within the model family. HP computers marked with the ENERGY STAR® Logo are compliant with the applicable U.S. Environmental Protection Agency (EPA) ENERGY STAR® specifications for computers. For more information about HP's ENERGY STAR® qualified products, go to hp.com: http://www.hp.com/ and select the applicable market segments and product categories to find PC configurations that meet the ENERGY STAR® specifications. 2. If a model family does not offer ENERGY STAR® compliant configurations, then energy efficiency data listed is for a typically configured model. 3. Energy Efficiency information published on the ECMA 370 The Eco Declaration represents a typically configured product base model meeting ENERGY STAR® specifications if offered within the model family. If optional components or modules are added, like extra hard disks or graphic cards etc, these can change the energy efficiency data listed above. 4. Power consumption in the Off / Apparent Off mode is measured and reported with the network interface controller (NIC) WOL disabled.			
P10	1. Acoustic noise information published on the ECMA 370 The Eco Declaration represents a typically configured product base model only. If optional items with moving parts are added, like extra hard disks or graphic cards with fans etc, these can change acoustic noise values for which HP can take no responsibility.			

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

THE ECO DECLARATION



Company environmental profile - THE ECO DECLARATION

Brand	HP	Logo 	
Company name *	Hewlett-Packard Company		
Contact information *	HP Environmental Contact Centre (ECC) environment@hp.com		
Internet site *	www.hp.com/hpinfo/globalcitizenship/environment/index.html		
Issue date *	2014-06		
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.

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 C6.

Quality control		Requirement met	
Item		Yes	No
QC1 *	The company enforces an internal quality control system 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.	☒	☐

Company environmental profile - Legal requirements		Requirement met		
Item		Yes	No	n.a.
C1	Product recycling			
C1.1*	The company participates in a system or has its own system for collection and recycling of end of life products in countries where the company puts them on the market and where required (see legal reference)	☒	☐	
C2	Battery recycling			
C2.1*	The company participates in a system or has its own system for collection and recycling of batteries in countries where the company puts products on the market (see legal reference) or pays eco tax / fee where required.	☒	☐	
C3	Packaging recycling			
C3.1*	The company participates in a system or has its own system for collection and recycling of packaging material in countries where the company puts products on the market and where required (see legal reference)	☒	☐	

Company environmental profile - Market requirements		Requirement met		
Item		Yes	No	n.a.
C4	Environmental policy and environmental management			
C4.1*	The company has a documented environmental policy approved by the management.	☒	☐	
C4.2*	The company has an environmental management system covering: Product development Manufacturing If so certified according to: ☒ ISO 14001 ☐ Other as specified in C6	☒ ☒ ☒	☐ ☐ ☐	
C4.3	The company regularly publishes an environmental report. If so, it meets the recommendations of ☒ The Global Reporting Initiative ☐ Other as specified in C6	☒	☐	☐
C5	Recycling			
C5.1*	Information about the product, battery & packaging take back system (C1, C2, C3) is available in printed or electronic format.	☒	☐	
C6	Additional information			
HP is committed to responsible business practices and <u>transparency</u> in its <u>global citizenship</u> policies and performance. We have a long history of working with suppliers to improve their social and environmental (SER) performance, as well as improving industry standards. HP endorses the EICC <u>Code of Conduct</u> in its entirety, and we supplement it with additional requirements specific to freedom of association and <u>HP's Student and Dispatch Worker Guidance Standard for Supplier Facilities in the People's Republic of China (PRC)</u>. HP also has a strong <u>Global Human Rights Policy</u> in place. HP sets expectations for its suppliers to establish policies and processes regarding conflict minerals. HP conducts due diligence on its supply chain annually including requesting information about our suppliers' own due diligence and the smelters and refiners used. HP became the first IT company to publish its <u>supply chain smelter list</u>. HP follows the Global Reporting Initiative (GRI) guidelines as a basis for reporting. The GRI index provides easy reference to HP's Living Progress Report (LPR) content. HP offers <u>take back services</u> of products and printing suppliers in some 70 countries. Please refer to HP's <u>Living Progress Report</u> for more details on our global efforts.				

Legal references Europe Annex A

Reference	Declaration item
2002/96/EC (WEEE directive)	C1.1
2006/66/EC (Battery and accumulators Directive)	C1.2
2004/12/EC (Directive on packaging and packaging waste)	C1.3