

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 Alvin L Carter 1009 Think Place Building 2 / 5F1 Morrisville, North Carolina 27560 alcarter@lenovo.com	lenovo				
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_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 PC				
Commercial name *	Lenovo G50-70m				
Model number *	20423;80G4				
Issue date *	2014-01-20				
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	equireme	ent 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 control such as organized by IT-Företagen (see www.itecodeclaration.org).	\square	

Model nu	mber		20423;80G4			
Issue date *		2014-01-202014-01-20 Logo				
Product	environ	mental attributes - Legal requirements		Require	ment	t met
ltem				Yes	No	n.a.
P1		ous substances and preparations				
P1.1*	chromiu	s do not contain more than; 0.1% lead, 0.01% cadmium, 0.1% mercury, 0.1 m, 0.1% polybrominated biphenyls (PBB) or 0.1% polybrominated diphenyl erence and Note B1)				
P1.2*	Products	s do not contain Asbestos (see legal reference). nt: Legal reference has no maximum concentration value.		\boxtimes		
P1.3*	Products hydrobro trichloro	s do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), pmofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbo ethane, methyl bromide (see legal reference). Comment: Legal reference l ration values.				
P1.4*		s do not contain more than; 0.005% polychlorinated biphenyl (PCB), 0.005% /l (PCT) in preparations (see legal reference).	% polychlorinated	\boxtimes		
P1.5*	Products	s do not contain more than 0.1% short chain chloroparaffins (SCCP) with 1 n containing at least 48% per mass of chlorine in the SCCP (see legal refe		\boxtimes		
P1.6*	Textile a Tris-(azi	nd leather parts with direct skin contact do not contain Tri-(2,3,-dibromopro ridinyl)-phosphineoxide (TEPA), polybrominated biphenyl (PBB) (see legal nt: Legal reference has no maximum concentration values.	pyl)-phosphate (TRIS),			
P1.7*	Textile a	and leather parts with direct skin contact do not contain more than 0.003% / c amines. (See legal reference and Note B1)	Azo colorants that split			\boxtimes
P1.8*	Wooder pentach	parts do not contain arsenic and chromium as a wood preservation treatm lorophenol and derivatives (see legal reference). nt: Legal reference has no maximum concentration values.	ent as well as			\square
P1.9*	Parts wi microgra	th direct and prolonged skin contact do not release nickel in concentrations am/cm ² /week (see legal reference). nt: Max limit in legal reference when tested according to EN1811:1998.	above 0.5			
P1.10*	REACH	Article 33 information about substances in articles is available at (add URL www.lenovo.com/social_responsibility/us/en/materials.html	or mail contact):	\boxtimes		
P2	Batterie	S				
P2.1*	more tha marked	oduct contains a battery or an accumulator, it is labeled with the disposal sy an 0.0005% of mercury (for button cells only) by weight, or more than 0.004 with the chemical symbol for the metal concerned, Hg or Pb. Information o I in user manual. (See legal reference)	% of lead, it shall be			
P2.2*		ells used in the product do not contain more than 2% by weight of mercury lators do not contain more than 0.0005% of mercury or 0.002% of cadmiun		\square		
P2.3*	design c	s and accumulators are easily removable by either users or service provide of the product). Exception: Batteries that are permanently installed for safe ntegrity reasons do not have to be "easily removable". (See legal reference	y, performance, medica			
P3		EMC connection to the telephone network and labeling				
P3.1*	The prod	duct complies with legally required safety standards as specified (see legal	reference).	\boxtimes		
P3.2*	The proo	duct complies with legally required standards for electromagnetic compatible).	lity (see legal	\square		
P3.3*	with lega	ct is intended for connection to a public telecom network or contains a radic ally required standards for radio and telecommunication devices (see legal	reference).			
P3.4*	The proc	duct is labeled to show conformance with applicable legal requirements (se	e legal reference).	\boxtimes		
P4		nable materials				
P4.1*	legal ref	o conductor (drum, belt etc.) is used in the product, it does not contain cad erence and Note B1).	, , , , , , , , , , , , , , , , , , ,			\boxtimes
P4.2*	If ink/tor	ner is used in the product, it does not contain cadmium max 0.1% by weight	t (see legal reference).			\boxtimes
P4.3*	product/	v/toner formulation/preparation is classified as hazardous according to appl packaging is adequately labeled and a Safety Data Sheet (SDS) in accordation nents is available (see legal reference).	0 /			
P5		t packaging				
P5.1*	hexavale	ng and packaging components do not contain more than 0.01% lead, ent chromium by weight of these together.				
P5.2*		backaging material is marked according to ISO 11469 referring ISO 1043 (s		\square		
P5.3*	Protocol	duct packaging material is free from ozone depleting substances as s (see legal reference). nt: Legal reference has no maximum concentration values.	pecified in the Montrea	ıl 🔀		

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

Model n	umber *	20423;80G4 20423;80G4				
Issue da	te *		ogo	leno	VO .	
Produc	t environ	mental attributes - Market requirements - Environmental conscious de	sign	Requirer	nent	met
ltem		atory to fill in. Additional information regarding each item may be found under P14.	- -	Yes	No	n.a.
P6	Treatme	nt information				
P6.1*	Informat	on for recyclers/treatment facilities is available (see legal reference).		\boxtimes		
P7	Design					
P7.1*		mbly, recycling thave to be treated separately are easily separable				
P7.2*						⊢⊢
		naterials in covers/housing have no surface coating.				_닏
P7.3*		arts >100g consist of one material or of easily separable materials.				
P7.4*		arts >25g have material codes according to ISO 11469 referring ISO 1043.				
P7.5	Plastic p	arts are free from metal inlays or have inlays that can be removed with commonly av	ailable tools.	\square		
P7.6*	Labels a	re easily separable. (This requirement does not apply to safety/regulatory labels).		\boxtimes		
	Product	lifetime				
P7.7*	Upgradir	ig can be done e.g. with processor, memory, cards or drives		\boxtimes		
P7.8*	Upgradir	g can be done using commonly available tools		\boxtimes		
P7.9.	Spare pa	rts are available after end of production for: 5 years				
P7.10		s available after end of production for: 5 years		_		Ħ
		and substance requirements				
P7.11*		cover/housing material type:				
	Material	type: PC+ABS-FR(40) Material type: Material t	type:			
P7.12	Electrica	I cable insulation materials of power cables are PVC free.			\boxtimes	
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.				Ħ
P7.15	All printe Note B2	d circuit boards (without components) >25g are halogen free. as defined in IEC61	249-2-21. (See			
P7.16		tarded plastic parts >25g in covers / housings are marked according ISO 1043-4:		\square		
P7.17	Alt. 1 Chemica	I specifications of flame retardants in printed circuit boards >25g (without component additive), TBBPA (reactive) X, Other; chemical name: , CAS #:	ts):			
	ISO 104	I specifications of flame retardants in printed circuit boards (without components) >2: 3-4: Brominated Epoxy Resin See P14	5g according			
P7.18	concentr Comm	etarded plastic parts >25g contain the following flame retardant substances/p ations above 0.1%: ent: No legal limits exist, this is a market requirement.	preparations ir	י 🗌		
	2. Chem 3. Chem Alt. 2	ical name: , CAS #: ical name: , CAS #: ical name: , CAS #: ical name: , CAS #:				
	FR(40)	I specifications of flame retardants in plastic parts >25g according ISO 1043-4:		\boxtimes		
P7.19	R40, R4	arts >25g are free from flame retardant substances/ preparations above 0.1% classif 6, R48, R50, R51, R53, R60, R61 and any combination of these (See Note B3)	ied as R45,			
P7.20		plastic parts' weight >25g, recycled material content is 2.7% .				
P7.21		plastic parts' weight >25g, biobased material content is 0%.				
P7.22		rces are free from mercury y is used specify: Number of lamps: and max. mercury content per lamp:	mg			
P8	Batterie	S .				
P8.1*	Battery of	hemical composition: Lithium Ion/Lithium Manganese Dioxide				
P8.2	Batteries	meet the requirements of the following voluntary program/s: US RBRC				

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 * 20423;80G4Lenovo G50-70m 20423;80G4 Issue date * 2014-01-20 Logo Ienovo.

Product environmental attribu	tes - Market requ	uirements (cont	tinued)	Requirement met	t
Item				Yes No	n.a.
P9 Energy consumption					
9.1 For the product the follow	01	8, 1			
Energy mode *	Power level at 100 V AC	Power level at 115 V AC	Power level at 230 V AC	Reference / Standard for energy modes and test method *	
Peak (On-max)	65 W	65 W	65 W	Full load	
Category 11/2/3		•	•		
Short Idle State - WOL Enabled	8.950 W	9.010 W	8.876 W	Use for ENERGY STAR V6 registration (P _{idle})	
Long Idle State - WOL Enabled	6.422 W	5.960 W	6.780 W	Use for ENERGY STAR V6 registration (P _{idle})	-
Sleep (S3) - WOL Enabled	0.662 W	0.547 W	0.606 W	Use for ENERGY STAR V6 registration(P _{sleep})	
Sleep (S3) - WOL Disabled	0.662 W	0.547 W	0.606 W	Reference	Ē
Off (S5) - WOL Enabled	0.232 W	0.258 W	0.303 W	Use for ENERGY STAR V6 registration(Poff)	H
Off (S5) - WOL Disabled	0.232 W	0.258 W	0.303 W	Use for EuP	
	•				
Category D 1/2 Short Idle State - WOL Enabled	NAW	NAW	NA W	Use for ENERGY STAR V6 registration (Pidle)	
Long Idle State - WOL Enabled	NAW				
		NA W	NA W	Use for ENERGY STAR V6 registration (P _{idle})	
Sleep (S3) - WOL Enabled	NAW	NA W	NA W	Use for ENERGY STAR V6 registration (P _{sleep})	닏
Sleep (S3) - WOL Disabled	NA W	NA W	NA W	Reference	
Off (S5) - WOL Enabled	NA W	NA W	NA W	Use for ENERGY STAR V6 registration(Pott)	
Off (S5) - WOL Disabled	NA W	NA W	NA W	Use for EuP	
EPS No-load	0.105 W	0.107 W	0.111 W		
(External power supply / charger plugged in the wall outlet but disconnected from the product.)					
PTEC * Typical Energy Consumption	W	W	W		
TEC * Typical Energy Consumption	kWh/week	kWh/week	kWh/week		
ETEC * Annual Energy Consumption	31.93 kWh/year	31.10 kWh/year	31.66 kWh/year	$E_{TEC} = (8760/1000) \times (P_{off} \times 0.25 + P_{sleep} \times 0.35 + P_{short idle} \times 0.3 + P_{long idle} \times 0.1)$	
	Poff: Off Mode(S5) -	WOL Enabled; Pslee	p: Sleep Mode(S3)	- WOL Enabled; P _{idle} : Idle State - WOL Enabled	
Display resolution* : 1280*800 Meg	apixels				
Print Speed * : Images	per minute				\square
Default time to enter energy save m	ode: 25 minutes				
P9.2* Information about the er	ergy save function i	s provided with th	e product.		
P9.3* The product meets the e ENERGY STAR® version Others specify: <i>Energy</i>	on: Version 6.0 Tie	er: Produc	t category: 11		
P10 Emissions			<u> </u>	-	
Noise emission – Decla		O 9296			
P10.1 Mode Mode	description		Declared A-weighted sound powe level L _{WAd} (d sound pressure level L_{pAm} (dB)	
	D.1.11-			operator attended)	
	D:Idle		* 2.51	19.2	IH.
Other mode	D: Operating		* 2.61	20.2 Energy Star for External Power Supplies	
Measured according to:		CMA-74			1
inicastred according to.			by ECMA-74 with	n L _{pAm} measurement distance m)	

P10.2	The product meets the acoustic noise requirements of the following voluntary program/s:	

Model number *		20423	3;80G4 L	eno	ovo (G50)-70	m	2042	3;80G	4			
Issue date *		2014-01-2	0							Logo	I	eno	10 ,	
	environn	nental att	ributes - Marl	et requ	uirements	s (conti	nued)				R	equire		
Item												Yes	No	n.a.
D/A At			ns from printin											
P10.3*			ording to ECMA			60) stand	lard 🔄, o	ther spe	ecify:					\square
P10.4	Typical e	emission rat	te (print phase)	· • • /										\boxtimes
		Dust	Ozone	Styre		Benzen		TVOC						
P10.5			requirements of			itary prog			met for :	_	l			\boxtimes
		Dust	Ozone 🔄	S	Styrene		Benzer	ne 🔄		TVOC				
B / A A		nagnetic e												
P10.6		er display m /s: MPR-II	eets the require	ment for	r low freque	ency elec	tromagne	tic fields	s of the fol	lowing volu	untary			
P11			rials for printin											
P11.1*	A Safety	Data Shee	t (SDS) is availa	able for th	he ink/tone	er prepara	ation, ever	n if not le	egally req	uired (see	P4.3).			\square
P11.2*	Paper c EN1228	01	ost-consumer r	ecycled f	fibers can	be used	l, provideo	d that it	meets th	ne requirer	ments of			\boxtimes
P11.3*	2-sided ((duplex) prir	nting/copying is	an integr	rated produ	uct function	on.							\boxtimes
P12	Ergonor	mics for co	mputing produ	icts										
P12.1*	The disp	olay meets t	he ergonomic re	quireme	ents of ISO	9241-30	7 for visua	al displa	y technolo	gies.		\boxtimes		
P12.2*	The phys	sical input c	levice meets the	e requirer	ments of IS	SO 9995	and ISO 9	9241-410).			\boxtimes		
P13	Packagi	ing and do	cumentation											
P13.1*	Product Product	packaging i packaging i	material type(s) material type(s) material type(s)	Polyeth Others	nylene Cus	on we shions ght (kg):): 0.106					
P13.2*	Product	plastic pack	kaging is free fro	m PVC.								\boxtimes		
P13.3*			ser and product er 🔀, Other 🗌	documer	ntation (ticl	k box):								
P13.4*		er user and	product docume	entation,	please spe	ecify cont	ained per	centage	of post-c	onsumer re	ecycled			
P14			tion (See Note											
	informati knowledg provided informati	ion containe ge available I here is app ion.	kes no represer ed in this docum e at the time of c proximate and p	ent. All in completio rovided fo	nformation on, and sup or informat	provided oplier sha tional pur	d by suppli Ill have no poses onl	ier in thi obligati ly. See a	s docume on to upd a Lenovo /	nt is provic ate such ir	led based	on sup . The in	plier's forma	tion
P 9			ualified Notebo star.gov/index.							p&pgw_cd	ode=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 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	Lenovo G50-70m	Logo
Model Number	80G4, 20423	_
Issue Date	2014/6/18	lenovo
Additional information		

P7.1.1	Product environmental attributes	
(d)	year of manufacture:	2014
(e)	E TEC value (kWh) and capability adjustments applied when all discrete graphics cards (dGfx) are disabled and if the system is tested with switchable graphics mode with UMA driving the display:	NA
(f)	E TEC value (kWh) per ErP Lot 3 Category and capability adjustments applied when all discrete graphics ca enabled:	ards (dGfx) are
	Category B Etec 19.89	
(g)	idle state power demand (Watts);	6.78
(h)	sleep mode power demand (Watts);	0.75
(i)	sleep mode with WOL enabled power demand (Watts) (where enabled);	0.76
(j)	off mode power demand (Watts);	0.27
(k)	off mode with WOL enabled power demand (Watts) (where enabled);	0.29
(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):	
	10% 20% 50% 100% Average ;	
	or level: V	
(0)	the minimum number of loading cycles that the batteries can withstand (applies only to notebook computers):	300cycles
(f)	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:	
	230V/50Hz	
(p-1)	the measurement methodology used to determine information mentioned in points (I) - internal PSU efficiency:	
	NA	
(p-2)	the measurement methodology used to determine information mentioned in points (m) - external PSU efficiency:	
	YES	

(p-3)	the i batte		nent methodology used to determine information mentioned in points (o) - loadingcycles	
	Dalle		YES	
(p-4)			ent methodology used to determine information mentioned in maximum, idle, sleep, off mode ned in Point P9.1 in the Product IT Eco Declaration:	
			YES	
(q)	sequ	ence of st	teps for achieving a stable condition with respect to power demand .:	
			YES	
(r)	desc	ription of I	how sleep and/or off mode was selected or programmed:	
			YES	
(s)	sequ off m		vents required to reach the mode where the equipment automatically changes to sleep and/or	
			YES	
(t)			of idle state condition before the computer automatically reaches sleep mode, or another h does not exceed the applicable power demand requirements for sleep mode (in minutes):	15min
(u)			time after a period of user inactivity in which the computer automatically reaches a that has a lower power demand requirement than sleep mode (in minutes):	30min
(v)	the I	ength of t	time before the display sleep mode is set to activate after user inactivity (in minutes):	10min
(w)	infor	mation on	the energy-saving potential of power management functionality:	
			YES	
(x)	user	informatio	on on how to enable the power management functionality:	
			YES	
(z)	the e	lectricity s	rs for measurements: — test voltage in V and frequency in Hz, — total harmonic distortion of supply system, — information and documentation on the instrumentation, set-up and circuits rical testing:	
			230V/50Hz	
Additio	on Notebo	ook Batte	ry Information:	
Yes	No	n/a	This notebook computer is operated by battery/ies that cannot be accessed and replaced by a nuser.	on-professional
			The battery[ies] in this product cannot be easily replaced by users themse	lves
Additia	onal infor	motion		
Additio		mation		
1				