

### 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/environme	nt.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 G40-70m			
Model number *	20422;80G3			
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	20422;80G3 <b>Lenovo G40-70m</b>	20422;80G3			
Issue da	te *	2014-01-202014-01-20	Logo	lend	DVO.	
Product	environ	mental attributes - Legal requirements		Require	ment	t met
Item				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)		$\square$		
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 h ration values.				
P1.4*		s do not contain more than; 0.005% polychlorinated biphenyl (PCB), 0.005% /l (PCT) in preparations (see legal reference).	6 polychlorinated	$\square$		
P1.5*	Products	s do not contain more than 0.1% short chain chloroparaffins (SCCP) with 10 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% A	Azo colorants that split			$\square$
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			
P1.9*	Parts wi microgra	th direct and prolonged skin contact do not release nickel in concentrations am/cm <sup>2</sup> /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 ww.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 of 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 cadmiurr		$\square$		
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 safet 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 proc	duct complies with legally required safety standards as specified (see legal	reference).	$\boxtimes$		
P3.2*	The proc referenc	duct complies with legally required standards for electromagnetic compatibi e).	lity (see legal	$\boxtimes$		
P3.3*	with lega	t is intended for connection to a public telecom network or contains a radio ally required standards for radio and telecommunication devices (see legal	eference).	$\boxtimes$		
P3.4*	The proc	duct is labeled to show conformance with applicable legal requirements (se	e legal reference).	$\boxtimes$		
P4	Consun	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).	, , , , , , , , , , , , , , , , , , ,			$\square$
P4.2*	If ink/tor	ner is used in the product, it does not contain cadmium max 0.1% by weight	(see legal reference).			$\boxtimes$
P4.3*	product/	v/toner formulation/preparation is classified as hazardous according to appli packaging is adequately labeled and a Safety Data Sheet (SDS) in accordation nents is available (see legal reference).				
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				
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	II 🔀		

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

Model n	umber *	20422;80G3 <b>Lenovo G40-70m</b> 20	0422;80G3			
Issue da	te *	2014-01-202014-01-20	Logo	leno	VO.	
		mental attributes - Market requirements - Environmental conscie		Require		
Item P6		atory to fill in. Additional information regarding each item may be found under nt information	P14.	Yes	No r	n.a.
P6.1*		on for recyclers/treatment facilities is available (see legal reference).		$\boxtimes$		
P7	Design					
		mbly, recycling				
P7.1*		t have to be treated separately are easily separable				
P7.2*	Plastic m	naterials in covers/housing have no surface coating.			$\boxtimes$	
P7.3*	Plastic p	arts >100g consist of one material or of easily separable materials.		$\square$		
P7.4*	Plastic p	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 comm	only available tools	. 🛛		
P7.6*	Labels a	re easily separable. (This requirement does not apply to safety/regulatory lab	els).			Π
	Product	lifetime				
P7.7*	Upgradir	g can be done e.g. with processor, memory, cards or drives		$\square$		
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: <b>5</b> years				
	Material	and substance requirements				
P7.11*		cover/housing material type:				
<b>D7</b> 40			aterial type:			
P7.12		I cable insulation materials of power cables are PVC free.		<u> </u>		<u>Ц</u>
P7.13		I cable insulation materials of signal cables are PVC free				
P7.14		/housing plastic parts >25g are free from chlorine and bromine.				<u>Ц</u>
P7.15	Note B2)		-			
P7.16	Marking:	tarded plastic parts >25g in covers / housings are marked according ISO 104 FR(40)	3-4:			
P7.17		I specifications of flame retardants in printed circuit boards >25g (without con additive) , TBBPA (reactive) , Other; chemical name: , CAS #:	nponents):			
	ISO 1043	I specifications of flame retardants in printed circuit boards (without compone 3-4: <b>Brominated Epoxy Resin See P14</b>	nts) >25g according	9		
P7.18	concentr	etarded plastic parts >25g contain the following flame retardant subst ations above 0.1%:	ances/preparations	in 🔲		
	1. Chem 2. Chem	ent: No legal limits exist, this is a market requirement. ical name: , CAS #: ical name: , CAS #: ical name: , CAS #:				
	Chemica FR(40)	I specifications of flame retardants in plastic parts >25g according ISO 1043-	4:	$\boxtimes$		
P7.19		arts >25g are free from flame retardant substances/ preparations above 0.1% 6, R48, R50, R51, R53, R60, R61 and any combination of these (See Note B3				
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		irces are free from mercury	no: ma	$\bowtie$		
P8	Batterie	y is used specify: Number of lamps: and max. mercury content per lar	np: mg			
P8.1*		hemical composition: Lithium Ion/Lithium Manganese Dioxide				
P8.2	-	meet the requirements of the following voluntary program/s: US RBRC				Ħ

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 \* 20422;80G3Lenovo G40-70m 20422;80G3 2014-01-20 Logo Issue date \* lenovo

Product environm	ental attribut	es - Market requ	irements (cont	linued)	Requirement met	
Item P9 Energy c	onsumption				Yes No	n.a
		ing power levels or	energy consumpt	tions are reporte	ed: See P14	
Energy mode *		Power level at	0, 1	•		
		100 V AC	115 V AC	230 V AC	method *	
Peak (On-max)		65 W	65 W	65 W	Full load	
Category 11/2/3						
Short Idle State - WO	OL Enabled	<b>8.595</b> W	<b>8.432</b> W	8.820 W	Use for ENERGY STAR V6 registration (P <sub>idle</sub> )	
Long Idle State - WC	L Enabled	5.554 W	5.370 W	5.420 W	Use for ENERGY STAR V6 registration (Pidle)	
Sleep (S3) - WOL En	abled	0.528 W	0.605 W	0.572 W	Use for ENERGY STAR V6 registration(P <sub>sleep</sub> )	Г
Sleep (S3) - WOL Dis	abled	0.528 W	0.605 W	0.572 W	Reference	
Off (S5) - WOL Enab		0.253 W	0.268 W	0.235 W	Use for ENERGY STAR V6 registration(Poff)	
Off (S5) - WOL Disat		0.253 W	0.268 W	0.235 W	Use for EuP	
. ,	neu	0.255 W	0.200 VV	0.235 VV	Use for Eur	
Category D 1/2						
Short Idle State - WO		NA W	NA W	NA W	Use for ENERGY STAR V6 registration (P <sub>idle</sub> )	L
Long Idle State - WC		NA W	NA W	NA W	Use for ENERGY STAR V6 registration (P <sub>idle</sub> )	L
Sleep (S3) - WOL En	abled	NA W	NA W	NA W	Use for ENERGY STAR V6 registration (P <sub>sleep</sub> )	
Sleep (S3) - WOL Dis	abled	NA W	NA W	NA W	Reference	
Off (S5) - WOL Enab	led	NAW	NA W	NA W	Use for ENERGY STAR V6 registration(Poff)	Г
Off (S5) - WOL Disal	led	NAW	NA W	NAW	Use for EuP	Г
EPS No-load		0.105 W	0.107 W	0.111 W		
(External power suppl plugged in the wall ou disconnected from the	tlet but					
PTEC * Typical Energy Consu	mption	W	W	W		Ľ
TEC * Typical Energy Consu	mption	kWh/week	kWh/week	kWh/week		
Етес * Annual Energy Consu		<b>29.63</b> kWh/year	<b>29.31</b> kWh/year	<b>30.20</b> 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; Pidle: Idle State - WOL Enabled	
Display resolution* :	1280*800 Mega	pixels				
Print Speed * :	Images p	per minute				$\square$
Default time to enter e	• •					
		ergy save function is	s provided with th	e product		
		nergy requirements	•	'		
ENERGY	STAR® versior	n: Version 6.0 Tie Star for External Po	er: Produc	t category: 11		
P10 Emission						
Noise em P10.1 Mode		red according to IS escription	U 9296	Declared	Declared A-weighted	
FIU.I Mode	wode d	escription		A-weighted sound power	d sound pressure level $L_{nAm}$ (dB)	
				level $L_{WAd}$	(B) Operator position ⊠ Bystander positions Desktop ⊠ (only if product is not	
				+ 0.00	— operator attended)	
Idle		):Idle		* 2.68	21.3	╎┝
Operation Other mo		: Operating		* 2.69	21.9 Eporar Star for External Power Supplies	L
					Energy Star for External Power Supplies	
weasured	according to:	= -	MA-74 Ny if not covered b	by ECMA-74 with	n L <sub>pAm</sub> measurement distance m)	

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

Model nu	mber *	20422;80G3 204	122;80G3					
Issue date	*	2014-01-20			Logo	leno	10	
Product	environn	nental attributes - Market ree	quirements (continued)			Require	ment	met
Item						Yes	No	n.a.
	Chemica	I emissions from printing prod	lucts					
P10.3*		ormed according to ECMA-328 (I		other specify:				$\square$
P10.4		mission rate (print phase) is (mg/	,					
		Dust Ozone Sty	vrene Benzene	TVOC				
P10.5		I emission requirements of the fo		are met for :				$\square$
	Electron	agnetic emissions						
P10.6		r display meets the requirement f	for low frequency electromagne	tic fields of the foll	owing voluntary	$\boxtimes$		
P11		able materials for printing proc	ducts					
P11.1*	A Safety	Data Sheet (SDS) is available for	r the ink/toner preparation, ever	n if not legally requ	iired (see P4.3).			$\boxtimes$
P11.2*	EN1228			d that it meets th	e requirements c	f		$\square$
P11.3*	2-sided (	duplex) printing/copying is an inte	egrated product function.					$\boxtimes$
P12	Ergonor	nics for computing products						
P12.1*	The disp	ay meets the ergonomic requiren	ments of ISO 9241-307 for visua	al display technolo	gies.	$\boxtimes$		
P12.2*	The phys	sical input device meets the requi	rements of ISO 9995 and ISO 9	9241-410.		$\boxtimes$		
P13	Packagi	ng and documentation						
P13.1*	Product Product	backaging material type(s): <i>Corru</i> backaging material type(s): <i>Polye</i> backaging material type(s): <i>Othe</i>	ethylene Cushions weight (kg): 0.230	<b>0.378</b> eight (kg): <b>0.081</b>				
P13.2*	Product	plastic packaging is free from PV	С.			$\square$		
P13.3*		nedia for user and product docum	nentation (tick box):					
		c 🔀, Paper 🔀, Other 🗌						
P13.4*	fiber: 0		n, please specify contained per	centage of post-co	onsumer recycled			
P14		al information (See Note B4)						
	informati knowledg provided informati		II information provided by suppl tion, and supplier shall have no d for informational purposes on	ier in this documer obligation to upda ly. See a Lenovo A	nt is provided base ate such information	ed on sup on. The in	plier's forma	
<b>P9</b>		rgy Star Qualified Notebooks & vw.energystar.gov/index.cfm?f			o&pgw_code=CC	)		

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 G40-70m	Logo
Model Number	80G3, 20422	_
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 19.29	
g)	idle state power demand (Watts);	6.56
h)	sleep mode power demand (Watts);	0.72
(i)	sleep mode with WOL enabled power demand (Watts) (where enabled);	0.74
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 ;	
(a)	or level: V the minimum number of loading cycles that the batteries can withstand (applies only to notebook computers):	
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 r batte		nent methodology used to determine information mentioned in points (o) - loadingcycles	
	balle	1163.	YES	
(p-4)			ent methodology used to determine information mentioned in maximum, idle, sleep, off mode led 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 le	ength of t	time before the display sleep mode is set to activate after user inactivity (in minutes):	10min
(w)	inforr	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 ical testing:	
			230V50HZ	
Additio	on Notebo	ok Batte	ry Information:	
Yes	No	n/a	This notebook computer is operated by battery/ies that cannot be accessed and replaced by a nu user.	on-professional
			The battery[ies] in this product cannot be easily replaced by users themse	lves
النام الم	onal infor	motion		
Auditio	marmor	mation		