



ECMA/TC38-TG3/2015/026 (Rev. 1 – 15 April 2015)

Annex B2 - Product environmental attributes Notebooks and Tablets

The declaration may be published only when all rows and/or fields marked with * are filled-in (n.a. for not applicable). Additional information regarding each item may be found under P15.

Brand *	Lenovo	Logo			
Company name *	Lenovo				
Contact information * e-mail address	Lenovo Global Environmental Affairs Alvin L Carter 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/ecodeclaration				

The company declares (based on product specification or test results based obtained from sample testing), that the product					
conforms to the statemen	nts given in this declaration.				
Type of product *	Portable Computer Tablet				
Commercial name *	Lenovo Tab M8 HD for Business				
Model number *	ZA79				
Issue date *	2020.7.18				
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.

About Annex B2

Annex B2 reflects Product environmental attributes relevant for Computers and Computer Monitors. The following items from the ECMA-370 Main body are not shown in the template:

P4.1 – P4.3 Consumable materials

P9.1 TEC and Print speed

P10.2 - P10.3 Chemical emissions from printing products

P11.1 - P11.3 Consumable materials for printing products

Woder Humber		ZA79	Logo	Lon	27/4	
Issue dat	te *	2020.7.18		Lend		J th
Product	environ	mental attributes - Legal requirements		Require	men	t met
Item				Yes	No	n.a.
P1	Hazardo	ous substances and preparations				
P1.1*	Products	s do comply with current European RoHS Directive. (See legal reference and NOTE	B1)	\boxtimes		
P1.2*		s do not contain Asbestos (see legal reference). nt: Legal reference has no maximum concentration value.				
P1.3*	Products hydrobro trichloroe concentr					
P1.4*		s do not contain more than; 0,005% polychlorinated biphenyl (PCB), 0,005% polych l (PCT) in preparations (see legal reference).	lorinated			
P1.5*		s do not contain more than 0,1% short chain chloroparaffins (SCCP) with 10-13 carb ntaining at least 48% per mass of chlorine in the SCCP (see legal reference).	oon atoms in th	e 🔀		
P1.6*	Parts with direct and prolonged skin contact do not release nickel in concentrations above 0,5 μg/cm²/week (see legal reference). Comment: Max limit in legal reference when tested according to EN1811:2011-5.					
P1.7*	REACH	Article 33 information about substances in articles is available at (add URL or mail www.lenovo.com/us/en/Lenovo-REACH-SVHC-Disclosure	contact):			
P2	Batterie	s				
P2.1*		oduct contains a battery or an accumulator, the battery/accumulator is labeled with t Information on proper disposal is provided in user manual. (See legal reference)	he disposal			
P2.2*	Batteries reference	s or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadme)	nium. (See lega	ıl 🔀		
P2.3*	Batteries	s and accumulators are readily removable. (See legal reference)		\boxtimes		
P3	Conforn	nity verification & Eco design (ErP)				
P3.1*	The prod	duct is CE-marked to show conformance with applicable legal requirements (see legal requirements) (see legal requirements				
P3.2*	The prod	duct complies with the Eco design requirements for energy-related products, al reference).				
	, ,	d information is; given in item P15 or added to this document, available at: https://www.lenovo.com/us/en/compliance/e	eco-declaration			
P5	Product	packaging	oo acciaration			
P5.1*	Packagii	ng and packaging components do not contain more than 0,01% lead, mercury ent chromium by weight of these together.	/, cadmium ar	nd 🔀		
P5 2*		kaging materials are marked with abbreviations and numbers indicating the nature	of the material/	e) 🔽	\neg	\neg

The product packaging material is free from ozone depleting substances as specified in the Montreal

Mandal mountains

NOTE B1 Restriction applies to the homogeneous material, unless other specified and expressed in weight %. Stating "Yes" means that the product is compliant with the mandatory requirements.

used (see legal reference).

Treatment information

Protocol (see legal reference).

Comment: Legal reference has no maximum concentration values.

Information for recyclers/treatment facilities is available (see legal reference).

P5.3*

P6

P6.1*

Model number *	ZA79	Logo	Lanava
Issue date *	2019.10.8		Leliovo

Product environmental attributes - Market requirements (See General NOTE GN below)							
		equire	ment	met			
Item	*=mandatory to fill in. Additional information regarding each item may be found under P14.	Yes	No	n.a.			
P7 P7.1*	Design, Disassembly, recycling		_				
	Parts that have to be treated separately are easily separable						
P7.2*	Plastic materials in covers/housing have no surface coating.		<u>X</u>				
P7.3*	Plastic parts > 100 g consist of one material or of easily separable materials.		Ц_	\boxtimes			
P7.4*	Plastic parts > 25 g have material codes according to ISO 11469 referring ISO 1043-4.	\boxtimes					
P7.5	Plastic parts are free from metal inlays or have inlays that can be removed with commonly available tools.	\boxtimes					
P7.6*	Labels are easily separable. (This requirement does not apply to safety/regulatory labels).	\boxtimes					
	Product lifetime						
P7.7*	Upgrading can be done e.g. with processor, memory, cards or drives		\boxtimes				
P7.8*	Upgrading can be done using commonly available tools		\boxtimes				
P7.9	Spare parts are available after end of production for: 2 years						
P7.10	Service is available after end of production for: 2 years						
	Material and substance requirements						
P7.11*	Product cover/housing material type (e.g. plastics, metal, aluminum):						
D7 10	Material type: PC+20%GF Material type: PC+ABS Material type: AL5252 Insulation materials of external electrical cables are PVC free.						
P7.12	Insulation materials of external electrical cables are PVC free.						
P7.13		- - - - - - - - - - - - - -	$\underline{\underline{X}}$				
P7.14	External plastic casing/cover parts > 25 g contain no more than 0,1% weight (1000 ppm) bromine and 0,1% weight (1000 ppm) chlorine attributable to brominated flame retardants, chlorinated flame retardants, and		\boxtimes	Ш			
	polyvinyl chloride or 0,3% weight (3000 ppm) bromine and 0,3% weight (3000 ppm) chlorine in parts						
	containing more than 25% post-consumer recycled content.						
P7.15	Printed circuit boards, PCBs (without components) are low halogen: all PCBs > 25 g are low halogen as defined in IEC 61249-2-21. (See 1NOTE B2)						
P7.16	Flame retarded plastic parts > 25 g in covers / housings are marked according ISO 1043-4: Marking:						
P7.17	Alt. 1: Chemical specifications of flame retardants in printed circuit boards > 25 g (without components):	1]			
	TBBPA (additive), TBBPA (reactive) (See NOTE B3), Other: DOPO , CAS #: 35948-25-5	\boxtimes					
	Alt. 2: Chemical specifications of flame retardants in printed circuit boards (without components) > 25 g						
	according ISO 1043-4:		Ш				
P7.18	<u>Alt. 1:</u> Flame retarded plastic parts > 25 g contain the following flame retardant substances/preparations in						
	concentrations above 0,1%:	\boxtimes					
	1. Chemical name: PX-200 , CAS #: 139189-30-3 (See NOTE B4) 2. Chemical name: BPADP , CAS #: 181028-79-5 "						
	3. Chemical name: , CAS #: "						
	Alt. 2: Chemical specifications of flame retardants in plastic parts > 25 g according ISO 1043-4:						
P7.19	In plastic parts > 25 g, flame retardant substances/preparations above 0,1% are used which have been	\boxtimes					
	assigned the following Risk phrases; R43, R22 and Hazard statements: XN						
	The source(s) for these classifications is/are found at (add URL(s)):						
	http://www.molbase.com/en/precursor_139189-30-3-moldata-67767.html, https://www.chemblink.com/MSDS/MSDSFiles/181028-79-5 Clear%20Synth.pdf (See note B5)						
P7.20*	Postconsumer recycled plastic material content is used in the product (See Note B6):		\boxtimes				
17.20	1 ostorioumor rodyolou piaddo material doment la dodd in the product (odd Note 20).	Ш		ш			
	If YES; at least one of the two alternatives below shall be answered;						
	 a) Of total plastic parts' weight > 25 g, the postconsumer recycled plastic material content (calculated as a percentage of total plastic by weight) is %. 						
	or						
	b) The weight of recycled material is g.						

GENERAL NOTE Standard references should direct to the latest version of a standard. If an older version of a standard is used, section P15 shall be used for explanation.

NOTE B2 IEC 61249-2-21 defines maximum limits of 900 ppm for each of the substances chlorine and bromine and a maximum limit of 1500ppm of these substances combined. The standard does not address fluorine, iodine and astatine which are included in the group of halogens.

NOTE B3 and B4 A Guidance document on Chemical substances is available; see http://www.ecma-international.org/publications/standards/Ecma-370.htm

NOTE B5 If a certain substance has been assigned a certain risk phrases / hazard statement in the referenced source, this does not necessarily mean the substance has been tested for all of the hazards referred to by a certain customer.

NOTE B6 Applies to a product containing plastic parts whose combined weight exceeds 100 g with the exception of printed circuit boards, cables, connectors and electronic components and bio-based plastic material.

Model nun	nber *	ZA79				Lopovo		
Issue date	*	2019.10.	8			Lenovo		
Product 6	environn	nental at	tributes - Market r	equirements (contir	nued)	Requirement met		
Item					,	Yes No n.a.		
	Material	and subs	stance requirements	(continued)				
P7.21*				d in the product (See No	OTE B7):			
P7.22*			ree from mercury, i.e. specify: Number of lar	less than 0,1 mg/lamp. mps: and maxim	um mercury content pe	er lamp: mg		
P8	Batteries	,	<u>., , </u>	<u></u>	<u> </u>	· · · · · · · · · · · · · · · · · · ·		
P8.1*	Battery c	hemical c	omposition: Li-ion Po	lymer				
P9	Energy consumption (See NOTE B8)							
P9.1		roduct the		ls or energy consumption				
Energy mo			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-i	max)		10 W	10 W	10 W	Full load		
Categor	<u>y2</u>							
Short Idle Enabled	State - W	OL	3.54 W	2.81 W	3.46 W	Use for ENERGY STAR V8.0 registration (P _{idle})		
Long Idle : Enabled	State - W	OL	0.29 W	0.29 W	0.32 W	Use for ENERGY STAR V8.0 registration (P _{idle})		
Sleep (S3)	- WOL Di	sabled	0.29 W	0.29 W	0.32 W	Use for ENERGY STAR V8.0 registration(P _{sleep})		
Off (S5) - V	VOL Disa	bled	0.14 W	0.14 W	0.17 W	Use for ENERGY STAR V8.0 registration(P _{off}) Use for ErP		
EPS No-loa (External power s wall outlet but disc	upply / charger	plugged in the the product.)	0.0242 W	0.0242 W	0.0326 W			
PTEC * Typical Ene	eray Cons	umption	W	W	W			
ETEC * Annual Ene		•	10.78 kWh/year	8.84 kWh/year	10.7 kWh/year	E _{TEC} = (8760/1000) x (P _{off} x 0.25 + P _{sleep} x 0.35 + P _{long_ldle} x 0.10+		
			Post: Off Mode(S5) - W	OL Enabled: Paleon: Sleep	Mode(S3) - WOL Enable	P _{short_idle} x 0.30) ed; P _{idle} : Idle State - WOL Enabled		
External Po	ower Supp	ly Efficien		I Efficiency Marking Pro				
Display res		•	· '	,9		 		
			ve mode: 1 minutes			 		
P9.2*				on is provided with the	product			
P9.3			class (monitors only):	on to provided with the	product.			
P10	Emissio		,,,					
			Declared according to	o ISO 9296 (See NOTE	B9)			
P10.1	Mode		Mode description	`		t A-weighted sound power level, L _{WA,c} (B)		
	Idle	*			*			
	Operatio	n *			*			
	Other mo	ode D	eclared A-weighted soun	od pressure level (dB) $L_{p{\sf Am}}$	(operator po	sition desktop – idle)		
	Other mo	ode D	eclared A-weighted soun	od pressure level (dB) $L_{p m Am}$	(operator po	sition desktop – operating)		
	Measure	d accordir	ng to: SO 7779	ECMA-74	•			
			Other	(only if not covered by	ECMA-74)			

NOTE B8 A Guidance document on Energy Efficiency is available; see http://www.ecma-international.org/publications/standards/Ecma-370.htm

NOTE B9 A Guidance document on Acoustic Noise is available; see http://www.ecma-international.org/publications/standards/Ecma-370.htm

NOTE B7 The following is to be excluded from the calculation of percentage: printed circuit boards, labels, cables, connectors and electronic components and postconsumer recycled plastic

Model nun	nber "	ZA79				Logo	Long	VO	
Issue date	*	2019.10.8					Leno	VU,	м
Product 6	environn	nental attributes	- Market requirements	(continued)			Require	ment	met
Item							Yes	No	n.a.
		nagnetic emission							
P10.4	program	(s):	requirement for low freque	ncy electromagnetic field	ls of the foll	owing voluntary			
P12		nics for computing							
P12.1*	The display meets the ergonomic requirements of ISO 9241-307 for visual display technologies.								
P12.2*	The phys	sical input device m	eets the requirements of IS	O 9995 and ISO 9241-41	10.				
P13	Packagi	ng and documenta	ntion						
P13.1*	Product packaging material type(s): box weight (kg): 0.083 Product packaging material type(s): paper(manual) weight (kg): 0.019 Product packaging material type(s): PP weight (kg): 0.008								
P13.2*	Product p	plastic primary pack	aging is free from PVC.						
P13.3*	For product primary corrugated fiberboard packaging, specify the contained percentage of minimum post-consumer recovered fiber content:								
P13.4*		media for user and r ronic, ⊠Paper, ☐	product documentation (tick Other	box):					
P13.5	Ùser and		em if paper documentation ation on paper media is chlo						
	•	hlorine-free al chlorine-free							
	Processe	ed chlorine-free							
P14	Voluntai	ry programs							
P14.1	The prod	luct meets the requi	rements of the following vo	luntary program(s):					
	Eco-labe Eco-labe	el:	Criteria version: 8.0 Criteria version: Criteria version:	Date: 2020-4 Date: Date:	Product	category: 2 category: category:			
P15		nal information (Se							
P9	Energy of	consumption of sp	ecific configuration may	vary; description of the	tested pro	oduct configura	tion:		
	informati knowledg	on contained in this ge available at the t here is approximat	epresentations, guarantees document. All information p ime of completion, and sup e and provided for informati	provided by supplier in th plier shall have no obliga	is documer tion to upda	nt is provided bas ate such informat	sed on supp tion. The inf	olier's formati	ion
P9			otebooks & Tablet Comput idex.cfm?fuseaction=find_a			code=CO			

NOTE B10 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 B2

Reference	Declaration item
Directive 2011/65/EU (RoHS Directive) * * Specific exemptions apply for certain products and applications.	P1.1
Regulation (EC) 1907/2006(REACH, Annex XVII	P1.2, P1.4, P1.6, P1.7
Regulation (EC) 2037/2000, 2038/2000, 2039/2000 (Marketing and use of Ozone layer depleting substances)	P1.3, P5.3
Norwegian regulation relating to restrictions on the use of certain dangerous chemicals 20.12.2002	P1.5
Directive 2013/56/EC (Battery and accumulators Directive) * * These provisions shall not apply where, for safety, performance, medical or data integrity reasons, continuity of power supply is necessary and requires a permanent connection between the appliance and the battery or accumulator.	P2.1, P2.2, P2,3, P8.1
Directive 2006/95/EC (Low Voltage Directive)	P3.1
Directive 2004/108/EC (EMC Directive)	P3.1
Directive 1999/5/EC (R&TTE Directive)	P3.1
Regulation (EC) 801/2013 amending Regulation (EC) No 1275/2008 with regard to ecodesign requirements for standby, off mode electric power consumption of electrical and electronic household and office equipment, and amending Regulation (EC) No 642/2009 with regard to ecodesign requirements for televisions	P3.1, P3.2
Regulation (EC) No 1272/2008 (CLP Regulation)	P7.19
Directive 2004/12/EC (Packaging Directive)	P5.1
Decision 97/129/EC (Secondary packaging legislation)	P5.2
Directive 2012/19/EU (WEEE directive)	P6.1

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 Tab M8 HD for Business	Logo	
Model Number	ZA79		Lenovo
Issue Date	2020.7.18		reliovo"
Additional information			

	Product environmental attributes				
(d)	Year of manufacture:				2020
(e)	Etec value (kWh) per ErP Lot 3 Catego disabled and if the system is tested with				cards (dGfx) are
f)	Etec value (kWh) per ErP Lot 3 Categor enable	y and capability adjust	tments applied when a	all discrete graphics	cards (dGfx) are
		Category A (according to ErP Lot 3)	Category B (according to ErP Lot 3)	Category C (according to ErP Lot 3)	Category D (according to ErP Lot 3)
	Memory over base [GB]	2			
ents	Additional internal storage	No (Yes / No)	(Yes / No)	(Yes / No)	(Yes / No)
capability adjustments applied during testing	Discrete television tuner	No (Yes / No)	(Yes / No)	(Yes / No)	(Yes / No)
ability a lied du	Discrete Audio Card	No (Yes / No)	(Yes / No)	(Yes / No)	(Yes / No)
cap	Discrete graphics Card(s) [number / #]	No #: (Yes / No)	#: (Yes / No)	#: (Yes / No)	#: (Yes / No)
	Category of discrete graphics Card(s)	No			
Test results	Etec Value (kWh) - dGfx disabled all discrete graphics cards (dGfx) are disabled/ UMA is active for switchable graphics/ product has no graphics cards (dGfx)	8.84			
Test r	Etec Value (kWh) - dGfx enabled all discrete graphics cards (dGfx) are enabled				
(g)	Idle state power demand (Watts);	•			2.81
(h)	Sleep mode power demand (Watts);				0.29
(i)	Sleep mode with WOL enabled power de	emand (Watts) (where	enabled);		
(j)	Off mode power demand (Watts);				0.14
(k)	Off mode with WOL enabled power dem	and (Watts) (where en	abled);		
(I)	Internal power supply efficiency at 10 %,	20 %, 50 % and 100 °	% of rated output pow	er (if applicable):	
	10% 20% 50%	100% Avera	age		
(m)	External power supply efficiency (if appli	cable)*:			
	Average active efficiency: 81.82%				
	*internal note: show values for all available external po				
(0)	Minimum number of loading cycles that t				capacity
(p-1)	Measurement methodology used to dete	rmine information mer NA	ntioned in points (I) – i	nternal PSU efficiency	:
(p-2)	Measurement methodology used to dete Measuring the Energy Consumption				

(p-3)	Measurement metho	dology used to determine information mentioned in p 0.5C Charge/Discharge	points (o) – loading cycles batteries:	
(p-4)	power as defined in F	dology used to determine information mentioned in r Point P9.1 in the Product IT Eco Declaration: IERGY STAR Final Test Method for Computers, I	·	
(q)		or achieving a stable condition with respect to power IERGY STAR Final Test Method for Computers, I		
(r)		eep and/or off mode was selected or programmed: agement, sleep mode: ACPI system level G1/S3		
		ACPI system level G2/S5 ('soft off') s		
(s)	off mode:	required to reach the mode where the equipment auter to power management, 1 mins automatically re		
(t)	condition which does	e condition before the computer automatically re not exceed the applicable power demand requirement	ents for sleep mode (in minutes):	1
(u)		a period of user inactivity in which the compute ver power demand requirement than sleep mode (in		NA
(v)	Length of time befo	re the display sleep mode is set to activate after	user inactivity (in minutes):	1
(w)	Information on the er	nergy-saving potential of power management function refer to user manual	nality:	
(x)	User information on h	now to enable the power management functionality: refer to user manual		
(z)		measurements: — test voltage in V and frequency in system, — information and documentation on the in- sting: 230V50HZ-2%-Edition 2.0, 2011-01, Section 4	strumentation, set-up and circuits	
Additiona	l Notebook Batter	v Information:		
		Battery[ies] <u>not</u> user replaceable	Battery[ies] user replaceable	n/a
		The battery[ies] in this product cannot be easily replaced by users themselves. 1)		
Internal/bu	ilt-in Battery			
External/d	etachable Battery			
Bios Back	up Battery			
Other:				
Additional	information			
Akymynarophan Las baterías de Výměnu baterie Brugeren kan ik Der Akku/die Al Kasutajad ei sa h μπαταρία[-ες' La/les batteria(s Korisnik ne moż La batteria/le batteria/le batteria/le batteriate [ene] i De batterij/batte Batteriet [ene] i De batterij/batte A ou as bateria Bateria (baterii/Batériu(-ie) v to Baterij/baterije 'Tämän tuotteer Det är inte enke	ra[μτe] Θατερυя[μ] в τοзи ι este producto no pueden chaterií v tomto výrobku by tke uden videre udskífte bakkus dieses Produkts kanna a selle toote akut/akusid is or présente(s) dans ce prode lako zamijeniti Bateriju s atterie in questo prodotto navar nomainīt šā ražojuma terijos [baterijų] pats vartot nulátorát/akkumulátorait a riji f'dan il-prodott ma tistax dette produktet kan ikke le n dit product is (zijn) door može sam w latwy sposób s deste produto não podere) din acest produs nu poamto výrobku nemôže vymi v tem izdeiku uporabnitik a akku [akut] ei[vät] ole help elt för kunden att själv byta	ρούν να αντικατασταθούν εύκολα από τους ίδιους τους χρήστες uit ne peuvent être facilement remplacée(s) par les utilisateurs e am u ovom proizvodu. on può/possono essere facilmente sostituita/e dall'utente. akumulatoru(-us). ojas negali lengvai pakeisti. felhasználó nem tudja egyedül egyszerűen kicserélni. (/jistgħux tiġi/jiġu sostitwita/i mill-utenti stess. ut erstattes av brukerne selv. de gebruiker niet gemakkelijk vervangbaar. uymenić baterii w tym produkcie. n ser facilmente substituídas pelos próprios utilizadores. te (pot) fi uşor înlocuită (înlocuite) de utilizatorii înşişi. enat použivatel. umi ne morejo zlahka zamenjati. posti käyttäjän vaihdettavissa.	werden.	