

ecma

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 *	Lenovo Global Environmental Affairs	Lenovo.				
e-mail address	Alvin L Carter	LEIIOVO				
	alcarter@lenovo.com					
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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 statements given in this declaration.						
Type of product *	Type of product * NoteBook PC					
Commercial name *	ThinkBook 14 G5 ABP/Zhaoyang X5-14 ABU/Lenovo X5-14 ABU					
Model number *	21JE,83B9					
Issue date *	2023/1/16					
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.

Model n	umber * 21JE,83B9 Logo	000		
Issue da	ite * 2023/1/16	enc		
Product	environmental attributes - Legal requirements	lequire	men	t met
Item		Yes	No	n.a.
P1	Hazardous substances and preparations			
P1.1*	Products do comply with current European RoHS Directive. (See legal reference and ^{5NO} TE 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), 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).			
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*	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 contact): https://www.lenovo.com/us/en/Lenovo-REACH-SVHC-Disclosure			
P2	Batteries			
P2.1*	If the product contains a battery or an accumulator, the battery/accumulator is labeled with the disposal symbol. Information on proper disposal is provided in user manual. (See legal reference)			
P2.2*	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 readily removable. (See legal reference)			
P3	Conformity verification & Eco design (ErP)			
P3.1*	The product is CE-marked to show conformance with applicable legal requirements (see legal reference). The Declaration of Conformity can be requested at (add link or e-mail address): https://www.lenovo.com/us/en/compliance/eu-doc for EU ; https://www.lenovo.com/us/en/compliance/uk-doc for UK			
P3.2*	The product complies with the Eco design requirements for energy-related products, (see legal reference).			
	Required information is; Z given in item P15 or added to this document,			
DE	available at (add URL): https://www.lenovo.com/us/en/compliance/eco-declaration			
P5.1*	Product packaging Packaging and packaging components do not contain more than 0,01% lead, mercury, cadmium and			
-	hexavalent chromium by weight of these together.			
P5.2*	The packaging materials are marked with abbreviations and numbers indicating the nature of the material(s) used (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.			
P6	Treatment information			
P6.1*	Information for recyclers/treatment facilities is available (see legal reference).			

Annex B1 of ECMA-370 5th edition (Lenovo) 2015-04-08

⁵ 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.

Model n	umber * 21JE,83B9 Logo					
Issue da	ate * 2023/1/16	Len	OV	D		
Produc	t environmental attributes - Market requirements (See General NOTE ^{6GN} below)					
	- Environmental conscious design	Require	ment	met		
Item	*=mandatory to fill in. Additional information regarding each item may be found under P14.	Yes	No	n.a.		
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.		\square			
P7.3*	Plastic parts > 100 g consist of one material or of easily separable materials.					
P7.4*	Plastic parts > 25 g have material codes according to ISO 11469 referring ISO 1043-4.	\square				
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: 5 years	-				
1 1.10	Material and substance requirements					
P7.11*	Product cover/housing material type (e.g. plastics, metal, aluminum):					
	Material type: <i>Aluminum</i> 5052 Material type: <i>Covestro FR3008</i> Material type: <i>Covestro</i>	FR3021				
P7.12	Insulation materials of external electrical cables are PVC free.					
P7.13	Insulation materials of internal electrical cables are PVC free.					
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 polyvinyl chloride or 0,3% weight (3000 ppm) bromine and 0,3% weight (3000 ppm) chlorine in parts containing					
P7.15	more than 25% post-consumer recycled content. Printed circuit boards, PCBs (without components) are low halogen: all PCBs > 25 g are low halogen as defined in IEC 61249-2-21. (See ⁷ NOTE B2)					
P7.16	Flame retarded plastic parts > 25 g in covers / housings are marked according ISO 1043-4: Marking: >FR(40)<					
P7.17	Alt. 1: Chemical specifications of flame retardants in printed circuit boards > 25 g (without components): TBBPA (additive), TBBPA (reactive) (See NOTE B3), Other: , CAS #:					
	<u>Alt. 2:</u> Chemical specifications of flame retardants in printed circuit boards (without components) > 25 g according ISO 1043-4: <i>FR16</i>					
P7.18	Alt. 1: Flame retarded plastic parts > 25 g contain the following flame retardant substances/preparations in concentrations above 0,1%: 1. Chemical name: ,, CAS #: , (See NOTE B4)					
	<u>Alt. 2:</u> 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 assigned the following Risk phrases; and Hazard statements:					
	The source(s) for these classifications is/are found at (add URL(s)): , (See note B5)					
P7.20*	 Postconsumer recycled plastic material content is used in the product (See Note ⁸⁸6): 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 11.23%. or b) The weight of recycled material is 31.86 g. 					

⁶ 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.

7 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.

8 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 nu	mber *	21JE ; 8	3 B 9			Logo	Lon		
Issue dat	e *	2023/1/1	6				Len	ovo	D.
Product	environ	nental at	tributes - Market r	equirements (cont	inued)		Requi	remer	nt met
Item							Yes	-	n.a.
	Materia	l and sub	stance requirements	(continued)				1.10	1
P7.21*	Biobase	d plastic n	naterial content is use	d in the product (See N					
	a) Of	total plasti			/ered; naterial content (calcula	ited as a percenta	ge of		
	b) The	e weight o	f the biobased plastic	material is g.					
P7.22*		Light sources are free from mercury, i.e. less than 0,1 mg/lamp. If mercury is used specify: Number of lamps: and maximum mercury content per lamp: mg							
P8	Batterie								
P8.1*	Battery	chemical c	composition: <i>Li-polym</i>	er					
P9			tion (See NOTE ^{10B8})				· · · · · · · · · · · · · · · · · · ·		
P9.1	For the	product the		ls or energy consumpt					
Energy mo	ode *		Power level at 100 V AC	Power level at 115 V AC	Power level at 230 V AC	Reference/Stan modes and test		nergy	
Peak (On-	-max)		65 W	65 W	65 W	Full load			
Categor	r <u>y 2</u>								
Short Idle Enabled	e State - W	/OL	5.49 W	5.35 W	5.32 W	ENERGY STAR Computers V8 (P _{idle})			
Long Idle State - WOL Enabled		4.71 W	4.53 W	4.79 W	ENERGY STAR Computers V8 (P _{idle})				
Sleep (S3) - WOL E	nabled	0.93 W	0.93 W	0.94 W	ENERGY STAR Computers V8 (P _{idle})			
Off (S5) -	WOL Ena	bled	0.3 W	0.3 W	0.31 W	ENERGY STAR Computers V8 (P _{idle})			
EPS No-Ic (External power	supply / charger		0.029 W	0.032 W	0.078 W				
ETEC * Annual En	nergy Cons		18.41 kWh/year	18.02 kWh/year	18.13 kWh/year	$E_{TEC} = (8760/1000) \times (P_{off} \times 0.25) + P_{sleep} \times 0.35 + P_{long_idle} \times 0.10 + P_{short_idle} \times 0.30)$			
			Poff: Off Mode(S5) - W	OL Enabled; Psleep: Slee	p Mode(S3) - WOL Enable			d	
External P	ower Sup	ply Efficier	cy Level (Internationa	I Efficiency Marking Pr	rotocol) * : VI				
Display re	solution *	: 1920*108	30 megapixels						
Default tim	ne to enter	energy sa	ave mode: 15 minutes						
P9.2*				ion is provided with the	product.	1			
P10	Emissio			•	·				
			Declared according t	o ISO 9296 (See NOT	E ^{11B9})				
P10.1	Mode		Node description	, <u> </u>	Statistical upper limi	it A-weighted sour	nd power leve	I, L _{WA,}	с (B)
	Idle	*	Idle		* 2.8			,	
	Operatio	on *	CPU Operating		* 3.3				
	Other m	-		d pressure level (dB) $L_{p m A}$					
	Other m	ode 🔽	eclared A-weighted sour	od pressure level (dB) $L_{p\mathrm{A}}$	m 29.4 (operator position	tion desktop – oper	rating)		
	Measure	_	ng to: 🛛 ISO 7779 🛛 her (only if not	ECMA-74 Covered by ECMA-74)					

9 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

10 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

Model nu	imber *	21JE ; 83B9					Logo			
Issue dat	te *	2023/1/16						Len)
Product	environn	nental attributes	- Market requireme	nts (co	ntinued)			Require	ement	met
Item								Yes	i No	n.a.
		nagnetic emissions								·
P10.4	program((s): EMC Directive		quency e	lectromagnetic fiel	ds of the follo	wing volunta	ry 🛛		
P12	-	nics for computing								
P12.1*	The disp	lay meets the ergon	omic requirements of IS	SO 9241-	307 for visual displ	lay technologi	es.			
P12.2*	The phys	sical input device me	eets the requirements o	f ISO 999	95 and ISO 9241-4	10.				
P13		ng and documenta								
P13.1*	Product packaging material type(s): single layer corrugated carboard(B Flute) weight (kg): 0.275 Product packaging material type(s): single layer corrugated carboard(E Flute) weight (kg): 0.028 Product packaging material type(s): Tracing paper weight (kg): 0.004 Product packaging material type(s): LDPE weight (kg): 0.015 Product packaging material type(s): EPE weight (kg): 0.086 Product packaging material type(s): Coated paper weight (kg): 0.015									
P13.2*	Product p	plastic primary pack	aging is free from PVC.							
P13.3*		luct primary corruga er recovered fiber co	ated fiberboard packag	ing, spec	cify the contained	percentage o	f minimum	post-		
P13.4*			roduct documentation (tick box)						
10.4		ronic, \square Paper, \square								
P13.5	User and	• •	em if paper documentat ation on paper media is		,					
	Totally cl	hlorine-free								
	Elementa	al chlorine-free								
	Processe	ed chlorine-free								
P14	Voluntar	ry programs								
P14.1	The prod	luct meets the requi	rements of the following	g voluntai	ry program(s):					
	ENERGY	Y STAR®	Criteria version:		Date: 2023/1/20	Product ca				
	Eco-labe	l: EPEAT	Criteria version: 1680.	.1-2018	Date: 2023/1/20	Product ca	tegory:			
	Eco-labe		Criteria version:		Date:	Product ca	tegory:			
	Criteria v	version:	Date:		Product category	<i>y</i> :				
P15	Addition	al information (Se	e ^{12NO} TE ^{13B10})							
P 9			ecific configuration m	ay vary:	description of th	e tested proc	luct configu	iration:		
	NOTE: S the infor supplier informat	Supplier makes no rmation contained ''s knowledge avail tion. The information	representations, guar in this document. All i lable at the time of cou on provided here is ap r more information.	antees, a informat mpletion	assurances or wa ion provided by s , and supplier sha	rranties whe upplier in thi all have no o	ther express s documen bligation to	s or implie t is provide update su	ed base ch	d on
P 9			Notebooks & Tablet C /index.cfm?fuseactior				&pgw_code	=CO		

¹³ 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) *	P1.1
* Specific exemptions apply for certain products and applications.	
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)	P2.1, P2.2, P2,3, P8.1
* 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.	
Directive 2006/95/EC (Low Voltage Directive)	P3.1
Directive 2004/108/EC (EMC Directive)	P3.1
Directive 1999/5/EC (R&TTE Directive)	<u>P3.1</u>
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	ThinkBook 14 G5 ABP/昭阳X5-14 ABU/Lenovo X5-14 ABU	Logo
Model Number	21JE ; 83B9	Lenovo
Issue Date	2023/1/16	Lenovo.
Additional information		

d)	Year of manufacture:				2023				
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 Category and capability adjustments applied when all discrete graphics cards (dGfx) are enable								
		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]	48							
ents sting	Additional internal storage	<mark>yes</mark> (Yes / No)	(Yes / No)	(Yes / No)	(Yes / No)				
Test results capability adjustments applied during testing	Discrete television tuner	No (Yes / No)	(Yes / No)	(Yes / No)	(Yes / No)				
	Discrete Audio Card	No (Yes / No)	(Yes / No)	(Yes / No)	(Yes / No)				
	Discrete graphics Card(s) [number / #]	No #: (Yes / No)	#: (Yes / No)	#: (Yes / No)	#: (Yes / No)				
	Category of discrete graphics Card(s)	Α							
	Etec Value (kWh) - dGfx disabled all discrete graphics cards (dGfx) are disabled/ UMA is active for switchable graphics/ product has no graphics cards (dGfx)	14.49							
Test	Etec Value (kWh) - dGfx enabled all discrete graphics cards (dGfx) are enabled								
g)	Idle state power demand (Watts);	·	·		4.43				
ר)	Sleep mode power demand (Watts);				1.02				
)	Sleep mode with WOL enabled power de	emand (Watts) (where	enabled);		1.02				
)	Off mode power demand (Watts);				0.37				
K)	Off mode with WOL enabled power dem	and (Watts) (where en	abled);		0.37				
I)	Internal power supply efficiency at 10 %, 10% 20% 50%	20 %, 50 % and 100 °, 20 %, 50 % and 100 °		er (if applicable):					
n)		External power supply efficiency (if applicable)*: Average active efficiency: 89.76%							
o)	Minimum number of loading cycles that	the batteries can withs		· /	300				
o-1)	Measurement methodology used to dete	rmine information mer NA	ntioned in points (I) – i	nternal PSU efficiency	:				

(p-2)	Measurement methodology used to determine information mentioned in points (m) – external PSU efficiency:					
		EN 50563:2011 measurement methodo	logy			
(p-3)	Measurement metho	dology used to determine information mentioned in p	ooints (o) – loading cycles batteries:			
		EN 61960 measurement methodolog	<i>yy</i>			
(p-4)		dology used to determine information mentioned in n	naximum, idle, sleep, off mode			
	power as defined in I	Point P9.1 in the Product IT Eco Declaration:				
		EN 61960 measurement methodolog	Jy			
(q)	Sequence of steps for	or achieving a stable condition with respect to power	demand::			
		EN 61960 measurement methodolog	<i>yy</i>			
(r)	Description of how sleep and/or off mode was selected or programmed:					
		Begin menu -> Power -> Select sleep or o				
(s)	Sequence of events off mode:	required to reach the mode where the equipment aut	comatically changes to sleep and/or			
		base on User Guide				
(t)	Duration of idle stat	te condition before the computer automatically re	eaches sleep mode, or another			
	condition which does	not exceed the applicable power demand requireme	ents for sleep mode (in minutes):	5		
(u)		r 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 t	user inactivity (in minutes):	15		
(w)	Information on the er	nergy-saving potential of power management function	nality:			
		Refer to User Guide	,			
(22)	Lloor information on l	now to another the newer management functionality.				
(x)	User information on how to enable the power management functionality:					
		Refer to User Guide				
(z)		measurements: — test voltage in V and frequency in system, — information and documentation on the ins sting:				
		230V, 50Hz, Total Haemonic Distortion	<2%			
Additiona	al Notebook Batter	v Information:				
		Battery[ies] not user replaceable	Battery[ies] user replaceable	n/a		
		The battery[ies] in this product cannot be easily replaced by users themselves. ¹⁾				
Internal/b	uilt-in Battery	\boxtimes				
External/detachable Battery						
Bios Backup Battery						
Other:						
Additional	information			1		
)						
, he battery[ies]	in this product cannot be e	asily replaced by users themselves.				

Акумулаторната[ите] батерия[и] в този продукт не може да се замени[ят] лесно от самите потребители.

Las baterías de este producto no pueden ser sustituidas fácilmente por los propios usuarios.

Der Akku/die Akkus dieses Produkts kann/können nicht ohne weiteres vom Benutzer selbst ausgetauscht werden.

Kasutajad ei saa selle toote akut/akusid ise hõlpsasti asendada.

La/les batterie(s présente(s) dans ce produit ne peuvent être facilement remplacée(s) par les utilisateurs eux-mêmes. Korisnik ne može lako zamijeniti Bateriju sam u ovom proizvodu.

Lietotāji paši nevar nomainīt šā ražojuma akumulatoru(-us).

Výměnu baterie/baterií v tomto výrobku by neměli provádět sami uživatelé.

Brugeren kan ikke uden videre udskifte batteriet/batterierne i dette produkt.

Η μπαταρία[-ες] στο προϊόν αυτό δεν μπορούν να αντικατασταθούν εύκολα από τους ίδιους τους χρήστες

La batteria/le batterie in questo prodotto non può/possono essere facilmente sostituita/e dall'utente.

Šio gaminio baterijos [bateriju] pats vartotojas negali lengvai pakeisti. A termék akkumulátorát/akkumulátorait a felhasználó nem tudja egyedül egyszerűen kicserélni.

I batterija/batteriji foai i-prodott ma tistav/jistgħux tiġ/jigu sostitwita/i mill-utenti stess. Batteriet [ene] i dette produktet kan ikke lett erstattes av brukerne selv.

De batterij(en) in dit product is (zijn) door de gebruiker niet gemakkelijk vervangbaar.

Użytkownik nie może sam w łatwy sposób wymienić baterii w tym produkcie.

A ou as baterias deste produto não podem ser facilmente substituídas pelos próprios utilizadores. Bateria (bateriile) din acest produs nu poate (pot) fi ușor înlocuită (înlocuite) de utilizatorii înșiși.

Batériu(-ie) v tomto výrobku nemôže vymieňať používateľ.

Baterij/baterije v tem izdelku uporabniki sami ne morejo zlahka zamenjati.

Tämän tuotteen akku [akut] ei[vät] ole helposti käyttäjän vaihdettavissa.

Det är inte enkelt för kunden att själv byta ut batteriet/batterierna.

Bu üründeki batarya(lar) kullanıcılar tarafından kolaylıkla değiştirilemez.