

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				
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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 *	Notebook				
Commercial name *	ThinkBook 14s 2 nd Gen AMD				
Model number *	20WD				
Issue date *	2020/9/9				
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 *	20WD Logo			
Issue date *		2020/8/19	.eno		
Produc	t environ	mental attributes - Legal requirements	Require		t met
Item			Yes	No	n.a.
P1		ous substances and preparations			
P1.1*	Product	s do comply with current European RoHS Directive. (See legal reference and NOTE B1)	\bowtie		
P1.2*	Comme	s do not contain Asbestos (see legal reference). nt: Legal reference has no maximum concentration value.	\square		
P1.3*	hydrobro trichloro	s do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), omofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrachloride, 1,1,1- ethane, methyl bromide (see legal reference). Comment: Legal reference has no maximum ration values.			
P1.4*	terpheny	s do not contain more than; 0,005% polychlorinated biphenyl (PCB), 0,005% polychlorinated yl (PCT) in preparations (see legal reference).	\boxtimes		
P1.5*		s do not contain more than 0,1% short chain chloroparaffins (SCCP) with 10-13 carbon atoms in th ontaining at least 48% per mass of chlorine in the SCCP (see legal reference).	e 🔀		
P1.6*	(see leg	th direct and prolonged skin contact do not release nickel in concentrations above 0,5 μg/cm²/weel al reference). nt: Max limit in legal reference when tested according to EN1811:2011-5.	k 🖂		
P1.7*	REACH	Article 33 information about substances in articles is available at (add URL or mail contact): tatic.lenovo.com/ww/docs/sustainability/lenovo-disclosure-reach-svhc-202004.pdf	\boxtimes		
P2	Batterie	S			
P2.1*		oduct contains a battery or an accumulator, the battery/accumulator is labeled with the disposal Information on proper disposal is provided in user manual. (See legal reference)	\boxtimes		
P2.2*	Batterie	s or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadmium. (See lega	I 🛛		
P2.3*	Batterie	s and accumulators are readily removable. (See legal reference)	\square		
P3	Conform	nity verification & Eco design (ErP)			
P3.1*	The pro	duct is CE-marked to show conformance with applicable legal requirements (see legal reference). claration of Conformity can be requested at: https://www.lenovo.com/us/en/compliance/eu-doc	\boxtimes		
P3.2*	The pro	duct complies with the Eco design requirements for energy-related products, al reference).	\boxtimes		
	Require	d information is; given in item P15 or added to this document, available at: https://www.lenovo.com/us/en/compliance/eco-declaration	\boxtimes		
P5	Product	t packaging			
P5.1*	Packagi	ng and packaging components do not contain more than 0,01% lead, mercury, cadmium ar ent chromium by weight of these together.	nd 🔀		
P5.2*	The pac	kaging materials are marked with abbreviations and numbers indicating the nature of the material ee legal reference).	s) 🔀		
P5.3*	The prod (see leg	duct packaging material is free from ozone depleting substances as specified in the Montreal Protoc al reference). nt: Legal reference has no maximum concentration values.	ol 🔀		
P6		ent information			
		ion for recyclers/treatment facilities is available (see legal reference).		_	_

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 *	20WD	Logo			
Issue da	ate *	2020/9/9		Leng	JVC	тн
Produc		mental attributes - Market requirements (See General NOTE GN	below)	Desuine		
ltom		onmental conscious design tory to fill in. Additional information regarding each item may be found under P14.		Require		
Item		Disassembly, recycling		Yes	No	n.a.
P7.1*	0 /	t have to be treated separately are easily separable				
P7.2*		aterials in covers/housing have no surface coating.				H
P7.3*		arts > 100 g consist of one material or of easily separable materials.		<u> </u>		
P7.4*		arts > 25 g have material codes according to ISO 11469 referring ISO 1043-4.		<u> </u>	⊢⊢	
P7.5		arts are free from metal inlays or have inlays that can be removed with commonly a	wailable tools	<u> </u>		
P7.6*	Labels are easily separable. (This requirement does not apply to safety/regulatory labels).				<u> </u>	
F7.0						
P7.7*	Product	ig can be done e.g. with processor, memory, cards or drives				
P7.8*		ig can be done using commonly available tools			┝	
P7.9		Ints are available after end of production for: 5 years				<u> </u>
						<u> </u>
P7.10		s available after end of production for: 5 years				
P7.11*		and substance requirements cover/housing material type (e.g. plastics, metal, aluminum):				
1 7.11	Material		al type: Aluminu	m		
P7.12		n materials of external electrical cables are PVC free.				
P7.13	Insulatio	n materials of internal electrical cables are PVC free.			Ħ	Ħ
P7.14		plastic casing/cover parts > 25 g contain no more than 0,1% weight (1000 ppm) bi	romine and 0.1		H	
	weight (´ polyvinyl	1000 ppm) chlorine attributable to brominated flame retardants, chlorinated flame chloride or 0,3% weight (3000 ppm) bromine and 0,3% weight (3000 ppm) chlorine ir n 25% post-consumer recycled content.	e retardants, ar	nd 🛄		
P7.15	as define	ircuit boards, PCBs (without components) are low halogen: all 🗌 PCBs > 25 g 📃 ed in IEC 61249-2-21. (See 1NOTE B2)	are low haloge	en	\boxtimes	
P7.16	Flame re Marking:	tarded plastic parts > 25 g in covers / housings are marked according ISO 1043-4:				\boxtimes
P7.17		nemical specifications of flame retardants in printed circuit boards > 25 g (without co PA (additive), TBBPA (reactive) (See NOTE B3), X Other: DOPD , CAS #: 359 4		\boxtimes		
		nemical specifications of flame retardants in printed circuit boards (without compone g ISO 1043-4: NA	ents) > 25 g			\square
P7.18	concentr 1. Chem 2. Chem	ame retarded plastic parts > 25 g contain the following flame retardant substance ations above 0,1%: ical name: , CAS #: 25971-63-5 (See NOTE B4) ical name: , CAS #: " ical name: , CAS #: "	s/preparations	in 🔀		
	<u>Alt. 2:</u> Cł	nemical specifications of flame retardants in plastic parts > 25 g according ISO 1043				
P7.19	assigned	parts > 25 g, flame retardant substances/preparations above 0,1% are used which the following Risk phrases; and Hazard statements:	i have been			
D7 cot			ee note B5)			
P7.20*	lfYES;a a) Oft ape or	sumer recycled plastic material content is used in the product (See Note B6): t least one of the two alternatives below shall be answered; otal plastic parts' weight > 25 g, the postconsumer recycled plastic material content ercentage of total plastic by weight) is 0%.	t (calculated as			
	b) The					

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 number *	20WD	Logo	Lonovo
Issue date *	2020/9/9		Lenovo

Product environmental attributes - Market requirements (continued) Item

Requirement met Yes No n.a.

	Material and su	bstance requirements	s (continued)		
P7.21*		material content is use		NOTE B7):	
	•		i v	,	
P7.22*		e free from mercury, i.e			
		d specify: Number of la	amps: and max	kimum mercury content p	per lamp: mg
P8	Batteries				
P8.1*		composition: Lithium		iese Dioxide	
P9		ption (See NOTE B8)			
P9.1		he following power leve			
Energy m		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 (Oi	n-max)	65 W	65 W	65 W	Full load
Catego	ory 2				
Short Id	le State - WOL	5.532 W	6.252 W	6.528 W	Use for ENERGY STAR V6
Enabled					registration (P _{idle})
Long Idl	e State - WOL	3.948 W	4.272 W	4.656 W	Use for ENERGY STAR V6
Enabled					registration (P _{idle})
Sleep (S	3) - WOL Enabled	0.444 W	0.468 W	0.504 W	Use for ENERGY STAR V6
					registration(P _{sleep})
0# (85)	- WOL Enabled	0.324 W	0.348 W	0.372 W	Use for ENERGY STAR V6
011 (35)	- WOL Enabled	0.324 W	0.346 W	0.372 VV	registration(P _{off}) Use for ErP
EPS No-		0.13 W	0.13 W	0.13 W	
(External pow	er supply / charger plugged in th disconnected from the product.)	ne			
PTEC *(aisconnected from the product.)	2.297 W	2.56 W	2.70 W	
	Energy Consumption				
TEC *(1)		0.386kWh/week	0.43kWh/week	0.454kWh/week	
Typical E	Energy Consumption	1			_
ETEC *(1) Annual E) Energy Consumption	20.07Wh/year	22.37kWh/year	23.59kWh/year	E _{TEC} = (8760/1000) x (P _{off} x 0.25 + P _{sleep} x 0.35 + P _{long_ldle} x 0.10+
					Pshort_Idle x 0.30)
					oled; Pidle: Idle State - WOL Enabled
External	Power Supply Efficie	ency Level (Internation	al Efficiency Marking	Protocol) * : VI	
Display r	esolution * : 2.074 n	negapixels			
Default ti	me to enter energy	save mode: 30 minutes	3		
P9.2*	Information abou	it the energy save func	tion is provided with t	he product.	
P9.3		y class (monitors only):	•	•	
P10	Emissions	, (
110		- Declared according	to ISO 9296 (See NC	TF B9)	
P10.1	Mode	Mode description	10100 0200 (000 110		nit A-weighted sound power level, LWA,c (B)
	Idle	* Idle mode		* 2.5	
	Operation	* Operating (CPU)		* 2.9	<u>_</u>
	Other mode	Declared A-weighted sou	nd pressure level (dB) _L		ion desktop – idle)
	Other mode	Declared A-weighted sou	nd pressure level (dB) L	22 (operator posit	ion desktop – operating)
		ding to: 🔀 ISO 7779 🕻		<i>p</i> Am	
		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 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

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

Model nu	mber *	20WD			Logo			
Issue dat	e *	2020/9/9				Lenc	VO	гм
Product	environ	mental attribut	es - Market requirement	s (continued)		Require	ment	met
Item						Yes	No	n.a.
		magnetic emissi						
P10.4			the requirement for low frequ AC adapter only)	ency electromagnetic field	ls of the following volunt	ary 🔀		
P12		mics for comput						
P12.1*	The display meets the ergonomic requirements of ISO 9241-307 for visual display technologies.							
P12.2*	The phy	sical input device	meets the requirements of I	SO 9995 and ISO 9241-41	10.			
P13	Packag	ing and docume	ntation					
P13.1*	Product	packaging mater packaging mater packaging mater	ial type(s): we	ight (kg): ight (kg): ight (kg):				
P13.2*	Product	plastic primary p	ackaging is free from PVC.	0 (0)		\boxtimes		
P13.3*		duct primary correct primary correct fibe	rugated fiberboard packaging r content: %	g, specify the contained	percentage of minimum	post-		
P13.4*		media for user ar ronic, 🔀Paper,	d product documentation (tic	k box):				
P13.5	Úser an		s item if paper documentatio entation on paper media is ch					
	-	hlorine-free al chlorine-free						
		ed chlorine-free						
P14		ry programs						
P14.1			quirements of the following v	oluntary program(s):				
1 14.1	The pro-		quirements of the following v	oluniary program(o).				
		Y STAR®	Criteria version: V8.0	Date: 2020/9/9	Product category: 2			
		el: EPEAT	Criteria version: 2.0	Date: 2020/9/9	Product category: Bro	onze		
DAC		el: PCGL	Criteria version:	Date: 2020/9/9	Product category:			
P15		nal information			tested avaduat confir			
г э			specific configuration may o representations, guarantee				a tha	
			his document. All information					
			e time of completion, and su					ion
	provideo	here is approxin	nate and provided for information					
	informat							
P9	See Ene http://ww	ergy Star Qualifie vw.energystar.go	d Notebooks & Tablet Computer v/index.cfm?fuseaction=find_	uters for the latest informat _a_product.showProductG	tion: roup&pgw_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	ThinkBook 14s G2 ARE	Logo
Model Number	20WD	
Issue Date	2020/9/9	Lenovo
Additional information		

P7.1.1	Product environmental attributes							
(d)	year of manufacture:				2020			
(e)	Etec value (kWh) per ErP Lot 3 Category 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.							
(f)	Etec value (kWh) per ErP Lot 3 Categor enable	y and capability adjust	ments applied when a	all discrete graphics o	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]	16						
lents sting	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	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)							
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)	14.48						
Test r	Etec Value (kWh) - dGfx enabled all discrete graphics cards (dGfx) are enabled							
(g)	Idle state power demand (Watts);		·		4.58			
(h)	Sleep mode power demand (Watts);				0.51			
(i)	Sleep mode with WOL enabled power de	emand (Watts) (where	enabled);		0.51			
(j)	Off mode power demand (Watts);				0.38			
(k)	Off mode with WOL enabled power dema	and (Watts) (where en	abled);		0.38			
(I)	Internal power supply efficiency at 10 %,	20 %, 50 % and 100 9	% of rated output pow	er (if applicable):				
	10% N/A 20% N/A 50% N/A 100%	N/A Average N/A						
(m)	external power supply efficiency (if applied	cable)*:						
	Average active efficiency: 89.5% meet l	Level VI						
(0)	*internal note: show values for all available external po Minimum number of loading cycles that t		and (applies only to n	otebook computers):				
(o)					300 cycles			
(p-1)	Measurement methodology used to dete	rmine information men NA	tioned in points (I) – i	nternal PSU efficiency:				
(p-2)	p-2) Measurement methodology used to determine information mentioned in points (m) – external PSU efficiency: EN 50563:2011 measurement methodology							

(p-3)	Measurement metho	dology used to determine information mentioned in p EN 61960 measurement methodology		
(p-4)		dology used to determine information mentioned in r Point P9.1 in the Product IT Eco Declaration: EN 62623:2013 measurement methodo		
(q)	Sequence of steps for	or achieving a stable condition with respect to power EN 62623:2013 measurement methodo		
(r)	Description of how s	eep and/or off mode was selected or programmed: Based on user manual		
(s)	Sequence of events off mode:	required to reach the mode where the equipment au Based on user manual	tomatically changes to sleep and/or	
(t)	condition which does	te condition before the computer automatically re not exceed the applicable power demand requirement	ents for sleep mode (in minutes):	10 mins
(u)		r a period of user inactivity in which the compute ver power demand requirement than sleep mode (in		N/A
(v)	Length of time befo	re the display sleep mode is set to activate after	user inactivity (in minutes):	30 mins
(w)	Information on the er	nergy-saving potential of power management function Based on user manual	nality:	
(x)	user information on h	now to enable the power management functionality: Based on user manual		
(z)	test parameters for n electricity supply sys for electrical testing:	neasurements: — test voltage in V and frequency in tem, — information and documentation on the instruction 230V , 50GHz , Total Harmonic Distortion	mentation, set-up and circuits used	
Addition	al Notebook Batter	y 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/o	detachable Battery			
Bios Back	kup Battery	\boxtimes		
Other:				
Additiona	l information			
kymynaróphar as baterias de ýměnu baterie rugeren kan ik er Akku/die Ał asutajad ei sa. µ/les batterie(s orisnik ne mož a batteria/le ba a batteria/le ba a batteria/le paši ne io gaminio bat termék akkum batterija/batte atteriet [ene] i e batterij(en) ii żytkownik nie ou as baterias ateria (baterilk	a[ure] батерия[и] в този п este producto no pueden s /baterií v tomto výrobku by ke uden videre udskifte bat kkus dieses Produkts kann/ a selle toote akut/akusid ise oro προϊόν αυτό δεν μπορ présente(s) dans ce produ te lako zamijeniti Bateriju sz atterie in questo prodotto no var nomainīt šā ražojuma a erijos [bateriju] pats vartoto nulátorát/akkumulátorait a fr nji ŕdan il-prodott ma tistax, dette produktet kan ikke let n dit product is (zijn) door d može sam w łatwy sposób s deste produto não podem	ούν να αντικατασταθούν εύκολα από τους ίδιους τους χρήστες it ne peuvent être facilement remplacée(s) par les utilisateurs eu am u ovom proizvodu. n può/possono essere facilmente sostituita/e dall'utente. kumulatoru(-us). las negali lengvai pakeisti. elhasználó nem tudja egyedül egyszerűen kicserélni. jistgňux tiĝi/jiĝu sostitwita/i mill-utenti stess. t erstattes av brukerne selv. e gebruiker niet gemakkelijk vervangbaar. wymienić baterii w tym produkcie. ser facilmente substituídas pelos próprios utilizadores. e (pot) fi uşor înlocuită (înlocuite) de utilizatorii înșiși.	verden.	

Baterij/okterije v tem izdelku upoze vymerat podzivateri. 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.