

## 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 / 5J3 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 *	enovo IdeaPad Z400/Lenovo Erazer						
	<b>Z4</b> 00						
Model number *	20201;5924,20224						
Issue date *	2012-10-25						
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	Requireme	nt 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 contro such as organized by IT-Företagen (see www.itecodeclaration.org).	ol 🔀	

Model number *	Lenovo IdeaPad Z400/Lenovo Erazer Z400
Issue date *	2012-10-26

Logo

lenovo

Product	environmental attributes - Legal requirements	Require	ment	met
Item		Yes	No	n.a.
P1	Hazardous substances and preparations			
P1.1*	Products do not contain more than; 0.1% lead, 0.01% cadmium, 0.1% mercury, 0.1% hexavalent chromium, 0.1% polybrominated biphenyls (PBB) or 0.1% polybrominated diphenyl ethers (PBDE). (See legal reference and Note B1)	$\boxtimes$		
P1.2*	Products do not contain Asbestos (see legal reference). Comment: Legal reference has no maximum concentration value.	$\boxtimes$		
P1.3*	Products do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC),	$\square$		
	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).	$\square$		
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).	$\boxtimes$		
P1.6*	Textile and leather parts with direct skin contact do not contain Tri-(2,3,-dibromopropyl)-phosphate (TRIS), Tris-(aziridinyl)-phosphineoxide (TEPA), polybrominated biphenyl (PBB) (see legal reference).			
<b>D</b> / <b>D</b>	Comment: Legal reference has no maximum concentration values.			
P1.7*	Textile and leather parts with direct skin contact do not contain more than 0.003% Azo colorants that split aromatic amines. (See legal reference and Note B1)			
P1.8*	Wooden parts do not contain arsenic and chromium as a wood preservation treatment as well as pentachlorophenol and derivatives (see legal reference).			
P1.9*	Comment: Legal reference has no maximum concentration values. Parts with direct and prolonged skin contact do not release nickel in concentrations above 0.5			
1 1.5	microgram/cm <sup>2</sup> /week (see legal reference). Comment: Max limit in legal reference when tested according to EN1811:1998.			
P1.10*	REACH Article 33 information about substances in articles is available at (add URL or mail contact): http://www.lenovo.com/social_responsibility/us/en/ThinkGreen_products.html#environment	$\square$		
P2	Batteries			
P2.1*	If the product contains a battery or an accumulator, it is labeled with the disposal symbol and if it contains more than 0.0005% of mercury (for button cells only) by weight, or more than 0.004% of lead, it shall be marked with the chemical symbol for the metal concerned, Hg or Pb. Information on proper disposal is			
P2.2*	provided in user manual. (See legal reference) Button cells used in the product do not contain more than 2% by weight of mercury. Other batteries or			
P2.3*	accumulators do not contain more than 0.0005% of mercury or 0.002% of cadmium. (See legal reference) Batteries and accumulators are easily removable by either users or service providers (as dependent on the design of the product). Exception: Batteries that are permanently installed for safety, performance, medica	e 🔀		
D2	or data integrity reasons do not have to be "easily removable". (See legal reference)			
P3.1*	Safety, EMC connection to the telephone network and labeling The product complies with legally required safety standards as specified (see legal reference).			
			<u> </u>	
P3.2*	The product complies with legally required standards for electromagnetic compatibility (see legal reference).			
P3.3*	If product is intended for connection to a public telecom network or contains a radio transmitter, it complies with legally required standards for radio and telecommunication devices (see legal reference).			
P3.4*	The product is labeled to show conformance with applicable legal requirements (see legal reference).	$\square$		
P4	Consumable materials			
P4.1*	If a photo conductor (drum, belt etc.) is used in the product, it does not contain cadmium max 0.01% (see legal reference and Note B1).			$\square$
P4.2*	If ink/toner is used in the product, it does not contain cadmium max 0.1% by weight (see legal reference).			$\bowtie$
P4.3*	If the ink/toner formulation/preparation is classified as hazardous according to applicable regulations, the product/packaging is adequately labeled and a Safety Data Sheet (SDS) in accordance with these requirements is available (see legal reference).			
P5	Product packaging			
P5.1*	Packaging and packaging components do not contain more than 0.01% lead, mercury, cadmium an hexavalent chromium by weight of these together.	nd 🔀		
P5.2*	Plastic packaging material is marked according to ISO 11469 referring ISO 1043 (see legal reference).	$\boxtimes$		
P5.3*	The product packaging material is free from ozone depleting substances as specified in the Montre. Protocol (see legal reference).	al 🔀		
	Comment: Legal reference has no maximum concentration values.			

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

Model n	number *	Lenovo IdeaPad Z400/Lenovo Erazer Z400							
Issue da	ate *	2012-10-25 Logo	le	lenovo					
Produc	duct environmental attributes - Market requirements - Environmental conscious design Requirement								
Item		tory to fill in. Additional information regarding each item may be found under P14.		Yes	No	n.a.			
P6	Treatme	nt information							
P6.1*	Informati	on for recyclers/treatment facilities is available (see legal reference).		$\boxtimes$					
P7	Design Disasse	mbly, recycling							
P7.1*	Parts that	t have to be treated separately are easily separable		$\boxtimes$					
P7.2*	Plastic m	aterials in covers/housing have no surface coating.		$\boxtimes$					
P7.3*	Plastic p	arts >100g consist of one material or of easily separable materials.		$\boxtimes$					
P7.4*	Plastic p	arts >25g have material codes according to ISO 11469 referring ISO 1043.		$\boxtimes$					
P7.5	Plastic p	arts are free from metal inlays or have inlays that can be removed with commonly availal	ole tools.						
P7.6*	Labels a	re easily separable. (This requirement does not apply to safety/regulatory labels).			Π	Π			
	Product	lifetime							
P7.7*	Upgradir	g 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: <b>5</b> years							
P7.10		s available after end of production for: 5 years				Π			
		and substance requirements							
P7.11*	Product	cover/housing material type:							
	Material	type: PC+ABS-FR(40) Material type: Material type							
P7.12		cable insulation materials of power cables are PVC free.			$\square$				
P7.13		I cable insulation materials of signal cables are PVC free			$\boxtimes$				
P7.14	All cover	/housing plastic parts >25g are free from chlorine and bromine.		$\boxtimes$					
P7.15	All printe Note B2	d circuit boards (without components) >25g are halogen free. as defined in IEC61249-	2-21. (See		$\square$				
P7.16	Flame re Marking:	tarded plastic parts >25g in covers / housings are marked according ISO 1043-4: <i>FR(40)</i>		$\square$					
P7.17	TBBPA ( Alt. 2 Chemica	I specifications of flame retardants in printed circuit boards >25g (without components): additive), TBBPA (reactive) ⊠, Other; chemical name: , CAS #:	ccording						
P7.18	Alt. 1 Flame r concentr	3-4: Brominated Epoxy Resin See P14 etarded plastic parts >25g contain the following flame retardant substances/preparations above 0.1%:	arations in						
	Provide complete 1. Chem 2. Chem	<ul> <li>it: No legal limits exist, this is a market requirement.</li> <li>a list of all used flame retardants including MSDS for each flame retardant. The list material name, CAS number and supplier.</li> <li>cal name: , CAS #: , Supplier:</li> <li>cal name: , CAS #: , Supplier:</li> </ul>	ust contain						
	Alt. 2	cal name: , CAS #: , Supplier: I specifications of flame retardants in plastic parts >25g according ISO 1043-4:							
P7.19		arts >25g are free from flame retardant substances/ preparations above 0.1% classified a 5, R48, R50, R51, R53, R60, R61 and any combination of these (See Note B3)	as R45,	$\square$					
P7.20		lastic parts' weight >25g, recycled material content is 5.4%.			<u>.</u>				
P7.21	Of total p	lastic parts' weight >25g, biobased material content is 0%.							
P7.22	Light sou	rces are free from mercury		$\boxtimes$					
P8	Batterie								
P8.1*		hemical composition: Lithium Ion/Lithium Manganese Dioxide							
P8.2	Batteries	meet the requirements of the following voluntary program/s: US RBRC							

Annex B of ECMA-370 4<sup>th</sup> edition, June 2009

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 *	<sup>Imber*</sup> Lenovo IdeaPad Z400/Lenovo Erazer Z400							
Issue date *	2012-10-	-25 Logo lenovo						
Product environmental attributes - Market requirements (continued)  Requirement met  Yes No n.a.								
Item	P9 Energy consumption							
9.1 For the product the following power levels or energy consumptions are reported: See P14								
		oped w/ WOL Enable						
Energy mode *		Power level at <b>100</b> V AC	Power level at 115 V AC	Power level at 230 V AC	Reference / Standard for and test method *	or energy modes		
Peak (On-max)		90W	90 W	90 W	Full load			
Category B						·		
Idle State - WOL Er	nabled	<b>8.195</b> ₩	8.141W	8.258 W	Use for Energy Star V5	registration(P <sub>idle</sub> )		
Sleep (S3) - WOL E	nabled	0.781 W	0.781 W	0.857W	Use for Energy Star V5	registration(P <sub>sleep</sub> )		
Sleep (S3) - WOL D	oisabled	0.601 W	0.603 W	0.779 W	Reference			
Off (S5) - WOL Ena	bled	0.495 W	0.497 W	0.598 W	Use for Energy Star V5	registration(Poff)		
Off (S5) - WOL Disa	abled	0.313W	0.325 W	0.401 W	Use for EuP			
EPS No-load (External power sup charger plugged in t outlet but disconnec the product.)	he wall	<i>0.136</i> W	0.140 W	<i>0.199</i> W		C		
TEC		kWh/week	kWh/week	kWh/week			$\triangleleft$	
Typical Energy Cons	sumption						-	
ETEC * Annual Energy Cons	sumption	22.699 kWh/year	22.711 kWh/year	23.804 kWh/year	$E_{TEC} = (8760/1000) \times (P_{o})$ 0.1 + $P_{idle} \times 0.3$	off $\mathbf{X} \ 0.6 + \mathbf{P}_{sleep} \ \mathbf{X}$	ב	
		Poff: Off Mode(S5) - V	WOL Enabled; P <sub>sleep</sub> : S	Sleep Mode(S3) - WOL	Enabled; P <sub>idle</sub> : Idle State - W	OL Enabled		
Display resolution	: <b>1280*80</b> 0	Megapixels						
Print Speed	:	Images per minu	te				$\triangleleft$	
Default time to enter	energy sa	ave mode: 25 minute	S				7	
P9.2* Informat	ion about t	the energy save fund	tion is provided with	the product.	I		Ŧ	
ENERG Others s	Y STAR® specify: En	the energy requirenversion: Version 5.2 Version: Version 5.2 Vergy Star for Externation	2 dated July 1, 201	Product category:	В			
P10 Emission Noise e		Declared according	to ISO 9296					
P10.1 Mode		Node description		WAU()	Desktop (or	0		
Idle		HDD: Idle		* 2.9	22.9			
Operatio		HDD: Operating		* 3.1	25.3	[	ב	
Other m								
Measure	ed accordir	ng to: 🔀 ISO7779 L	ECMA-74		h l magging mant distant	) oo)		
P10.2 The proc	duct meets	the acoustic noise i			h L <sub>pAm</sub> measurement distar program/s:		$\triangleleft$	

Model numb	<sup>mber*</sup> Lenovo IdeaPad Z400/Lenovo Erazer Z400							
Issue date *		2012-10-	Logo lenovo.					
Product environmental attributes - Market requirements (continued) Requirement met								
Item	-	oncumpt	ion				Yes No n.a.	
P9         Energy consumption           9.1         For the product the following power levels or energy consumptions are reported: See P14								
Т	he produ		ped w/ WOL Enable					
Energy mode *		Power level at 100 V AC	Power level at 115 V AC	Power level at 230 V AC	Reference / Stand and test method *	lard for energy modes		
Peak (On-ma	ax)		65W	65 W	65 W	Full load		
Category	<u>A</u>							
Idle State - V	NOL Ena	abled	7.553W	7.416W	7.786 W	Use for Energy Sta	ar V5 registration(P <sub>idle</sub> )	
Sleep (S3) -	WOL En	abled	0.774 W	0.776 W	0.861W	Use for Energy Sta	ar V5 registration(P <sub>sleep</sub> )	
Sleep (S3) -	WOL Dis	sabled	0.699 W	0.705 W	<b>0.780</b> W	Reference		
Off (S5) - W0	OL Enab	led	0.550 W	0.556 W	0.631 W	Use for Energy Sta	ar V5 registration(P <sub>off</sub> )	
Off (S5) - W0	OL Disat	oled	0.321W	0.327 W	0.419 W	Use for EuP		
EPS No-load			0.129 W	0.130 W	0.195 W			
(External power supply / charger plugged in the wall outlet but disconnected from the product.)		e wall						
TEC			kWh/week	kWh/week	kWh/week			
Typical Energ	gy Consu	Imption						
ETEC * Annual Energy Consumption		mption	21.815 kWh/year	21.613 kWh/year	23.095 kWh/year	$E_{TEC} = (8760/1000)$ 0.1 + $P_{idle} \ge 0.3$	) x (P <sub>off</sub> x 0.6 + P <sub>sleep</sub> x	
			Poff: Off Mode(S5) - V	VOL Enabled; P <sub>sleep</sub> : S	leep Mode(S3) - WOL	. Enabled; P <sub>idle</sub> : Idle St	ate - WOL Enabled	
Display resol	ution :	1280*800	Megapixels					
Print Speed			Images per minu	te				
•	to enter e	enerov sa	ve mode: 25 minute					
			he energy save func		the product.			
			the energy requirem			/e·		
			version: Version 5.2					
		-	ergy Star for Extern	nal Power Supplies	Eligibility Criteria	Version 2		
-	Emission	-	Declared according	to ISO 0206				
	<i>loise em</i> <i>l</i> ode		Declared according Iode description	10 120 9290	Declared	Declared	A-weighted	
					A-weighted		e level $L_{pAm}$ (dB)	
				sound power level $L_{WAd}$ (B)	Operator position 🔀	Bystander positions		
				WAd (D)	Desktop 🔀			
				or Desk side	(only if product is not operator attended)			
lo	dle	*	HDD: Idle		* 2.9	:	22.9	
	Operation		HDD: Operating		* 3.1		25.3	
	Other mo							
Ν	leasured	laccordir	· _	ECMA-74				
D10.2 -		4	Other			n L <sub>pAm</sub> measurement		
P10.2 T	ne produ	ict meets	the acoustic noise r	equirements of the f	ollowing voluntary p	program/s:		

Model nu	mber *	Lenovo IdeaPad Z400/Lenovo Erazer Z400			
Issue dat	e *	2012-10-25 Logo	lena	vo	
Product	environr	nental attributes - Market requirements (continued)	Requir	amont	mot
Item	CITVITOIN	nental attributes - market requirements (continued)	Yes	No	n.a.
nom	Chemic	al emissions from printing products	103	110	n.a.
P10.3*					
P10.4		formed according to ECMA-328 (ISO/IEC 28360) standard , other specify:			
F 10.4	• •	Dust Ozone Styrene Benzene TVOC			
P10.5		al emission requirements of the following voluntary program/s are met for :			$\boxtimes$
F 10.5		Dust Ozone Styrene Benzene TVOC			
		nagnetic emissions			
P10.6		er display meets the requirement for low frequency electromagnetic fields of the following voluntar	y 🖂		
		/s: <b>MPR-II</b>			
P11		hable materials for printing products			
P11.1*		Data Sheet (SDS) is available for the ink/toner preparation, even if not legally required (see P4.3)	).		$\square$
P11.2*	Paper c EN1228	ontaining post-consumer recycled fibers can be used, provided that it meets the requirement: 1.	s of		$\square$
P11.3*	2-sided	(duplex) printing/copying is an integrated product function.			$\square$
P12	Ergono	nics for computing products			
P12.1*	The disp	lay meets the ergonomic requirements of ISO 9241-307 for visual display technologies.	$\boxtimes$		
P12.2*	The phy	sical input device meets the requirements of ISO 9995 and ISO 9241-410.			
P13	Packagi	ng and documentation			
P13.1*	Product	packaging material type(s): Corrugated Carton weight (kg): 0.378 packaging material type(s): Polyethylene Cushions weight (kg): 0.058 packaging material type(s): Others weight (kg):0.230			
P13.2*	Product	plastic packaging is free from PVC.	$\boxtimes$		
P13.3*		media for user and product documentation (tick box): ic 🔀, Paper 🔀, Other 🗍			
P13.4*	For pape	er user and product documentation, please specify contained percentage of post-consumer recycle % (Japan only 70%)	ed		
P14		nal information (See Note B4)			
	informat knowled provided informat		ased on su ation. The i	pplier's nforma	3
P7.17		t does not contain free TBBPA in printed circuit boards(without components)>25g.			
P9		ergy Star Qualified (insert appropriate Product type; i.e. Desktop, Notebook, etc.) for the late ownloads.energystar.gov/bi/qplist/laptops_prod_list.xls (insert appropriate web url)	est informa	tion:	

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