

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.

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Company name *	Lenovo			
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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 Flex 2 Pro-15/Lenovo Edge 15				
Model number *	20406;80FL;80K8;20507,20442;80H1;80K9;20508				
Issue date *	2015-01-16				
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.

Quality	Control	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 *	20406;80FL;80K8;20507,20442;80H1;80K9;2	0508
Issue date *	2015-01-16	Logo

Issue dat	te *	* 2015-01-16		lenovo				
Product	t environ	mental attributes - Legal requirements		Requ	iirem	ent	met	
Item				Y	es N	٧o	n.a.	
P1	Hazardo	ous substances and preparations						
P1.1*	0.1% po	s do not contain more than; 0.1% lead, 0.01% cadmium, 0.1% mercury, 0.1% hexavely by the second seco		omium, D	3 [
P1.2*		s do not contain Asbestos (see legal reference). nt: Legal reference has no maximum concentration value.						
P1.3*	hydrobro	s do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), pmofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrach ethane, methyl bromide (see legal reference). Comment: Legal reference has no n		,1-				

	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).	\boxtimes	
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). 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)		\boxtimes
P1.8*	Wooden parts do not contain arsenic and chromium as a wood preservation treatment as well as pentachlorophenol and derivatives (see legal reference). Comment: Legal reference has no maximum concentration values.		\boxtimes
P1.9*	Parts with direct and prolonged skin contact do not release nickel in concentrations above 0.5 microgram/cm ² /week (see legal reference). Comment: Max limit in legal reference when tested according to EN1811:1998.	\square	
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/materials.html	\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 provided in user manual. (See legal reference)		
P2.2*	Button cells used in the product do not contain more than 2% by weight of mercury. Other batteries or accumulators do not contain more than 0.0005% of mercury or 0.002% of cadmium. (See legal reference)	\boxtimes	
P2.3*	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, medical or data integrity reasons do not have to be "easily removable". (See legal reference)	\square	
P3	Safety, EMC connection to the telephone network and labeling		
P3.1*	The product complies with legally required safety standards as specified (see legal reference).	\boxtimes	
P3.2*	The product complies with legally required standards for electromagnetic compatibility (see legal reference).	\boxtimes	
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).	\square	
P3.4*	The product is labeled to show conformance with applicable legal requirements (see legal reference).	\boxtimes	
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).		\boxtimes
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).		\boxtimes
P5	Product packaging		
P5.1*	Packaging and packaging components do not contain more than 0.01% lead, mercury, cadmium and hexavalent chromium by weight of these together.		
P5.2*	Plastic packaging material is marked according to ISO 11469 referring ISO 1043 (see legal reference).	\square	
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.		
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Note B1: Restriction applies to the homogeneous material, unless other specified and expressed in weight %.

Model nu	del number * 20406;80FL;80K8;20507,20442;80H1;80K9;20508					
Issue da	te *	2015-01-16	Logo	leno	vo.	
Product		mental attributes - Market requirements - Environmental conscious de	esign	Require	ment	met
Item		atory to fill in. Additional information regarding each item may be found under P14.		Yes	No	n.a.
P6		nt information				
P6.1*		on for recyclers/treatment facilities is available (see legal reference).				
P7	Design Disasse	mbly, recycling				
P7.1*	Parts that	at have to be treated separately are easily separable		\square		
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 parts >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 commonly av	ailable tools.			
P7.6*		re easily separable. (This requirement does not apply to safety/regulatory labels).			Ħ	Ħ
	Product					
P7.7*		ng can be done e.g. with processor, memory, cards or drives				
P7.8*		ng can be done using commonly available tools			Ħ	Ē
P7.9.		arts are available after end of production for: 5 years				H
P7.10		s available after end of production for: 5 years				
1 1.10		and substance requirements				
P7.11*		cover/housing material type:				
		type: PC+ABS-FR(40) Material type: Material	type:			
P7.12		I cable insulation materials of power cables are PVC free.	••		\boxtimes	
P7.13	Electrica	I cable insulation materials of signal cables are PVC free				
P7.14	All cover	/housing plastic parts >25g are free from chlorine and bromine.			Ē	
P7.15	All printe	ed circuit boards (without components) >25g are halogen free. as defined in IEC6	1249-2-21. (See			
P7.16	Note B2) tarded plastic parts >25g in covers / housings are marked according ISO 1043-4:				
	Marking:					
P7.17	Alt. 1 Chemica	Il specifications of flame retardants in printed circuit boards >25g (without componen	ts):			
	TBBPA (additive) 🔲, TBBPA (reactive) 🔀, Other; chemical name: , CAS #:		_	_	
	Alt. 2			_	_	_
		Il specifications of flame retardants in printed circuit boards (without components) >2 3-4: Brominated Epoxy Resin See P14	5g according			
P7.18	Alt. 1	standed plastic parts >25g contain the following flame retardant substances	Inconcrationa i	~ —		
		etarded plastic parts >25g contain the following flame retardant substances/ ations above 0.1%:	preparations in			
	Comm	ent: No legal limits exist, this is a market requirement.				
	1. Chem	ical name: , CAS #:				
		ical name: , CAS #:				
		ical name: , CAS #:				
	Alt. 2 Chemica	I specifications of flame retardants in plastic parts >25g according ISO 1043-4:				
	FR(40)			\boxtimes		
P7.19		arts >25g are free from flame retardant substances/ preparations above 0.1% classi 6, R48, R50, R51, R53, R60, R61 and any combination of these (See Note B3)	fied as R45,			
P7.20	Of total p	plastic parts' weight >25g, recycled material content is 1.3%.				
P7.21	Of total p	plastic parts' weight >25g, biobased material content is 0%.				
P7.22		urces are free from mercury		\boxtimes		
DO		y is used specify: Number of lamps: and max. mercury content per lamp:	mg			
P8.1*	Batterie:	s chemical composition: Lithium Ion/Lithium Manganese Dioxide				
	,					<u> </u>
P8.2	Datteries	meet the requirements of the following voluntary program/s: US RBRC				

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.

Issue date	* 2015-01	1-16	, ,	,	Logo lenovo	
Broduct	nvironmontal	ttributos Markot	roquiromonts (continued)	Poquiromont	mot
Item	environmental a	<mark>ittributes - Market</mark>	requirements (continued)	Requirement Yes No	n.a.
P9	Energy consum	ption				
9.1		ne following power leve	els or energy cons	umptions are re	ported: See P14	
Energy mo	de *	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)	65 W	65 W	65 W	Full load	
Categor	y 1					I
Short Idle	State - WOL Enal	bled 9.480 W	9.384 W	10.092 W	Use for ENERGY STAR V6 registration (P _{idle})	
Long Idle	State - WOL Enab	oled 4.788 W	4.500 W	4.596 W	Use for ENERGY STAR V6 registration (P _{idle})	
Sleep (S3)	- WOL Enabled	0.708 W	0.708 W	0.756 W	Use for ENERGY STAR V6 registration(P _{sleep})	
Sleep (S3)	- WOL Disabled	0.708 W	0.708 W	0.756 W	Reference	
Off (S5) - V	NOL Enabled	0.156 W	0.168 W	0.216 W	Use for ENERGY STAR V6 registration(Port)	
	NOL Disabled	0.156 W	0.168 W	0.216 W	Use for EuP	
Categor						
	<u>State - WOL Enal</u>	bled W	W	W	Use for ENERGY STAR V6 registration(Pidle)	
	State - WOL Enab		W	W	Use for ENERGY STAR V6 registration(P _{idle})	
-	- WOL Enabled	W	W	W	Use for ENERGY STAR V6 registration (P _{sleep})	
	- WOL Disabled	W	W	W	Reference	
	NOL Enabled	W	W	W	Use for ENERGY STAR V6 registration(P _{off})	
	VOL Disabled	W	W	W	Use for EuP	
EPS No-loa		0.071 W	0.075 W	0.141 W		
(External p plugged in	ower supply / char the wall outlet but ed from the produc	ger				
PTEC * Typical Ene	ergy Consumption	W	W	W		
TEC * Typical Ene	ergy Consumption	kWh/week	kWh/week	kWh/week		
ETEC *		31.62	31.14	33.34	$E_{TEC} = (8760/1000) \times (P_{off} \times 0.25 + P_{sleep} \times 0.35)$	
Annual Ene	ergy Consumption	kWh/year	kWh/year	kWh/year	+ P _{long_ldle} x 0.10+ P _{short_ldle} x 0.30)	
		P.,.: Off Mode(S	5) - WOL Enabled:	P: Sleep Mode	(S3) - WOL Enabled; P _{idle} : Idle State - WOL Enabled	
Display res	olution* : 1920*10		,,	sieep.		
Print Speed	d* :	Images per minute				\boxtimes
		ave mode: 25 minutes	3			
P9.2*	0,	t the energy save func		th the product.		
P9.3*	ENERGY STAR®	ts the energy requirem				
P10	Others specify: Emissions					
	Noise emission	- Declared according	to ISO 9296			
P10.1	Mode	Mode description		Declared A-weighted sound powe		
				level L_{WAd} (B) Operator position Bystander positions Desktop (only if product is not or Desk side (only if product is not operator attended)	
	Idle	* HDD:Idle		* 3.8	27	
	Operation	* HDD: Operating		* 4.0	31	
	Other mode		7			
	Measured accord	ing to: KISO7779 Other	ECMA-74 (only if not co	vered by ECMA-	74 with L _{pAm} measurement distance m)	

20406;80FL;80K8;20507,20442;80H1;80K9;20508

Model number

Other	(only if not covered by ECMA-74 with L_{pAm} measurement distance
The product meets the acoustic noise requ	irements of the following voluntary program/s:

P10.2

Model nu	mber *	20406;80FL;80K8;20507,20442;80H1;80K9;2	0508			
Issue date	ə *	2015-01-16	Logo	leno	10.	
Product	environn	nental attributes - Market requirements (continued)		Require	ment	met
Item				Yes	No	n.a.
	Chemica	al emissions from printing products				
P10.3*	Test per	formed according to ECMA-328 (ISO/IEC 28360) standard 🔲, other specify:				\boxtimes
P10.4	Typical e	emission rate (print phase) is (mg/h):				\square
		Dust Ozone Styrene Benzene TVOC				
P10.5		al emission requirements of the following voluntary program/s are met for :				\square
	Electror	nagnetic emissions				
P10.6		er display meets the requirement for low frequency electromagnetic fields of the follo /s: MPR-II	wing voluntary	\boxtimes		
P11	Consum	able materials for printing products				
P11.1*	-	Data Sheet (SDS) is available for the ink/toner preparation, even if not legally requi				\boxtimes
P11.2*	EN1228		e requirements o	of		\square
P11.3*	2-sided ((duplex) printing/copying is an integrated product function.				\boxtimes
P12		nics for computing products				
P12.1*	The disp	lay meets the ergonomic requirements of ISO 9241-307 for visual display technolog	ies.	\boxtimes		
P12.2*	The phys	sical input device meets the requirements of ISO 9995 and ISO 9241-410.		\square		
P13	Packagi	ng and documentation				
P13.1*	Product Product	packaging material type(s): Corrugated Carton weight (kg): 0.337 packaging material type(s): Polyethylene Cushions weight (kg): 0.060 packaging material type(s): Others weight (kg): 0.123				
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*	fiber: 0		nsumer recycled			
P14		nal information (See Note B4)				
	informati knowled	Supplier makes no representations, guarantees, assurances or warranties whether e on contained in this document. All information provided by supplier in this document ge available at the time of completion, and supplier shall have no obligation to updat here is approximate and provided for informational purposes only. See a Lenovo A on.	is provided base e such information	d on supp on. The inf	olier's formati	ion
P9		rgy Star Qualified Notebooks & Tablet Computers for the latest information: ww.energystar.gov/index.cfm?fuseaction=find_a_product.showProductGroup	&pgw_code=CO			

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 Flex 2 Pro-15/Lenovo Edge 15	Logo
Model Number	20406;80FL;80K8;20507,20442;80H1;80K9;20508	
Issue Date	2015-01-16	lenovo
Additional information		

P7.1.1	Product environmental attributes						
(d)	year of manufacture:	2014					
(e)	E TEC 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:						
	Category (according to ErP Lot 3): A Etec: 14.31						
(f)	E TEC value (kWh) per ErP Lot 3 Category and capability adjustments applied when all discrete graphics cards (dGfx) are enabled:						
	Category (according to ErP Lot 3): B Etec: 14.33						
(g)	idle state power demand (Watts);	4.72					
(h)	sleep mode power demand (Watts);	0.82					
(i)	sleep mode with WOL enabled power demand (Watts) (where enabled);						
(j)	off mode power demand (Watts);	0.23					
(k)	off mode with WOL enabled power demand (Watts) (where enabled);						
(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):						
	Average 45W: 87.58%,87.60%,88.32%; 65W:89.04%,89.92%,89.18%;						
	*internal note: show values for all available external power supplies						
(0)	the minimum number of loading cycles that the batteries can withstand (applies only to notebook computers):	300 cycles					
(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:						
	Energy-star requirement						
(p-3)	the measurement methodology used to determine information mentioned in points (o) – loadingcycles batteries:						
	IEC 61960 measurement methodology						

(p-4)) the measurement methodology used to determine information mentioned in maximum, idle, sleep, off mode power as defined in Point P9.1 in the Product IT Eco Declaration:								
	Energy-star requirement								
(q)	sequence of steps for achieving a stable condition with respect to power demand::								
	Based on user manual								
(r)	description of how sleep and/or off mode was selected or programmed:								
				Based on user manual					
(s)	s) sequence of events required to reach the mode where the equipment automatically changes to sleep and/or off mode:								
				Based on user manual					
(t)	the duration of idle state condition before the computer automatically reaches sleep mode, or another condition which does not exceed the applicable power demand requirements for sleep mode (in minutes): 25								
(u)	the length of time after a period of user inactivity in which the computer automatically reaches a power mode								
()	that has a lower power demand requirement than sleep mode (in minutes):								
(v)	the length of time before the display sleep mode is set to activate after user inactivity (in minutes): 10 information on the energy-saving potential of power management functionality:								
(w)	mormation	i on the energy-saving	potent	al of power management functionality.					
Based on user manual									
(x)	user information on how to enable the power management functionality:								
Based on user manual									
(z) 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, Total Harmonic Distortion <2 %									
Addition N	otebook Ba	ttery Information:							
Yes		No	n/	This notebook computer is operated by battery/ies that cannot by replaced by a non-professional user.	be accessed and				
(Battery		ser (Battery user	а	The battery[ies] in this product cannot be easily	replaced by				
replaceable)	replaceable)		users themselves	replaced by				
Additional information									