

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 / 5F1 Morrisville, North Carolina 27560 alcarter@lenovo.com	lenovo.			
Internet site *	http://www.lenovo.com/social_responsibility/us/en/environmen	t.html			
Additional information	The latest version of this document can be found at attemption of the control of				

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 V310-14ISK				
Model number *	80SX;80UF				
Issue date *	2016-04-10				
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 control such as organized by IT-Företagen (see www.itecodeclaration.org).	ol 🔀	

Model number *	80SX;80UF		
Issue date *	2016-04-10	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)			
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),	\boxtimes		
	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)			
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.			
P1.9*	Parts with direct and prolonged skin contact do not release nickel in concentrations above 0.5 microgram/cm²/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/materials.html			
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)			
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).			
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).			
P4.2*	If ink/toner is used in the product, it does not contain cadmium max 0.1% by weight (see legal reference).		П	\square
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 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).	\boxtimes		
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.			

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

Model number *	80SX;80UF		
Issue date *	2016-04-10	Logo	lenovo.

Product	duct environmental attributes - Market requirements - Environmental conscious design					
Item	*=mandatory to fill in. Additional information regarding each item may be found under P14.	quirer Yes	No	n.a.		
P6	Treatment information					
P6.1*	Information for recyclers/treatment facilities is available (see legal reference).	\boxtimes				
P7	Design					
P7.1*	Disassembly, recycling Parts that have to be treated separately are easily separable					
				 		
P7.2*	Plastic materials in covers/housing have no surface coating.			-		
P7.3*	Plastic parts >100g consist of one material or of easily separable materials.		<u> </u>	-		
P7.4*	Plastic parts >25g have material codes according to ISO 11469 referring ISO 1043.		<u>Ц</u>	<u>Ц</u>		
P7.5	Plastic parts are free from metal inlays or have inlays that can be removed with commonly available tools.		<u>Ц</u>	<u>Ц</u>		
P7.6*	Labels are easily separable. (This requirement does not apply to safety/regulatory labels).		Ш			
	Product lifetime					
P7.7*	Upgrading can be done e.g. with processor, memory, cards or drives		<u>Ц</u>	<u>Ц</u>		
P7.8*	Upgrading can be done using commonly available tools			_ <u>_</u> _		
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					
	Material and substance requirements					
P7.11*	Product cover/housing material type:					
P7.12	Material type: PC+ABS-FR(40) Material type: Material type: Electrical cable insulation materials of power cables are PVC free.		\square			
P7.13	Electrical cable insulation materials of power cables are PVC free.	井		∺		
P7.13	-			井		
	All cover/housing plastic parts >25g are free from chlorine and bromine.			- -		
P7.15	All printed circuit boards (without components) >25g are halogen free. as defined in IEC61249-2-21. (See Note B2)	<u> </u>		<u> </u>		
P7.16	Flame retarded plastic parts >25g 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 >25g (without components): TBBPA (additive) , TBBPA (reactive) , Other; chemical name: , CAS #:					
	Alt. 2 Chemical specifications of flame retardants in printed circuit boards (without components) >25g according ISO 1043-4: <i>Brominated Epoxy Resin See P14</i>					
P7.18	Alt. 1 Flame retarded plastic parts >25g contain the following flame retardant substances/preparations in concentrations above 0.1%:					
	Comment: No legal limits exist, this is a market requirement.					
	1. Chemical name: , CAS #:					
	2. Chemical name: , CAS #:					
	3. Chemical name: , CAS #: Alt 2					
	Chemical specifications of flame retardants in plastic parts >25g according ISO 1043-4: FR(40)	\boxtimes		П		
P7.19	Plastic parts >25g are free from flame retardant substances/ preparations above 0.1% classified as R45, R40, R46, R48, R50, R51, R53, R60, R61 and any combination of these (See Note B3)					
P7.20	Of total plastic parts' weight >25g, recycled material content is 6.0%.					
P7.21	Of total plastic parts' weight >25g, biobased material content is 0%.					
P7.22	Light sources are free from mercury					
P8	If mercury is used specify: Number of lamps: and max. mercury content per lamp: mg					
P8.1*	Batteries Battery chemical composition: Lithium Ion/Lithium Manganese Dioxide					
P8 2	Batteries meet the requirements of the following voluntary program/s: US RBRC			\dashv		

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 *	80SX;80UF		
Issue date *	2016-04-10	Logo	lenovo.

Peak (On-max) Peak (On-max) Short Idle State - WOL Enabled 8.820 W 9.060 W 9.264 W Use for ENERGY STAR V6 registration (P _{idle}) Short Idle State - WOL Enabled Possible Value Vest Ves
9.1 For the product the following power levels or energy consumptions are reported: See P14 Energy mode * Power level at 100 V AC Peak (On-max) 65 W 65 W Full load Category I1
Energy mode * Power level at 100 V AC 115 V AC 230 V AC method * Peak (On-max) 65 W 65 W Full load Category I1
Peak (On-max) 65 W 65 W Full load Category I1
Category I1
Long Idle State - WOL Enabled 5.340 W 5.580 W 5.484 W Use for ENERGY STAR V6 registration (Pidie)
Sleep (S3) - WOL Enabled 0.876 W 0.876 W Use for ENERGY STAR V6 registration(P _{Sleep})
Sleep (S3) - WOL Disabled 0.876 W 0.876 W Reference
Off (S5) - WOL Enabled 0.540 W 0.540 W Use for ENERGY STAR V6 registration(Port)
Off (S5) - WOL Disabled 0.540 W 0.540 W Use for EuP
Category D 1/2
Short Idle State - WOL Enabled W W Use for ENERGY STAR V6 registration (P _{idle})
Long Idle State - WOL Enabled W W Use for ENERGY STAR V6 registration (P _{idle})
Sleep (S3) - WOL Enabled W W Use for ENERGY STAR V6 registration (Psleep)
Sleep (S3) - WOL Disabled W W Reference
Off (S5) - WOL Enabled W W Use for ENERGY STAR V6 registration(Poff)
Off (S5) - WOL Disabled W W Use for EuP
EPS No-load 0.070 W 0.073 W 0.129 W
(External power supply / charger plugged in the wall outlet but
disconnected from the product.)
PTEC * W W W
Typical Energy Consumption
TEC * kWh/week
Typical Energy Consumption kWh/week kWh/week
ETEC * 31.73 kWh/year 32.57 33.33 E _{TEC} = (8760/1000) x (P _{off} x 0.25 + P _{sleep} x 0.35
ETEC * 31.73 kWh/year 32.57 33.33 E _{TEC} = (8760/1000) x (P _{off} x 0.25 + P _{sleep} x 0.35 + P _{short idle} x 0.3+ P _{long idle} x 0.1)
P _{off} : Off Mode(S5) - WOL Enabled; P _{sleep} : Sleep Mode(S3) - WOL Enabled; P _{idle} : Idle State - WOL Enabled Display resolution*: 1920*1080 Megapixels
Print Speed * : Images per minute
Default time to enter energy save mode: 25 minutes
P9.2* Information about the energy save function is provided with the product.
P9.3* The product meets the energy requirements of the following voluntary program/s:
ENERGY STAR® version: Version 6.1 Tier: Product category: B Others specify:
P10 Emissions
Noise emission – Declared according to ISO 9296 P10.1 Mode Mode description Declared Declared A-weighted
A-weighted sound pressure level I A-m (dB)
Soulid power
Desktop N
or Desk side (only if product is not operator attended)
Idle * HDD:Idle * 2.7 23.8
Operation * HDD: Operating * 3.3 35.0
Other mode
Measured according to: ☑ ISO7779 ☐ ECMA-74 ☐ Other (only if not covered by ECMA-74 with L _{pAm} measurement distance m)
P10.2 The product meets the acoustic noise requirements of the following voluntary program/s:

Model number *	80SX;80UF		
Issue date *	2016-04-10	Logo	lenovo.

					Requirement me	
P9 Energy consump	ation				Yes No	n.a.
0,	e following power levels or	r eneray consumpt	ions are reporte	d: See <i>P14</i>		
Energy mode *	Power level at 100 V AC		<u> </u>	Reference / Standard for method *	energy modes and test	
Peak (On-max)	65 W	65 W	65 W	Full load		
Category I2		1				
Short Idle State - WOL Enal	oled 10.716 W	10.572 W	10.824 W	Use for ENERGY STAR	V6 registration (Piglis)	
Long Idle State - WOL Enab		7.368 W	7.332 W	Use for ENERGY STAR		
Sleep (S3) - WOL Enabled	0.972 W	0.972 W	1.032 W	Use for ENERGY STAR	()	
Sleep (S3) - WOL Disabled	0.972 W	0.972 W	1.032 W	Reference		
Off (S5) - WOL Enabled	0.624 W	0.624 W	0.684 W	Use for ENERGY STAR	V6 registration(P _{off})	
Off (S5) - WOL Disabled	0.624 W	0.624 W	0.684 W	Use for EuP		
Category D 1/2						
Short Idle State - WOL Enak	oled W	W	W	Use for ENERGY STAR	V6 registration (P _{idle})	
Long Idle State - WOL Enab	led W	W	W	Use for ENERGY STAR	V6 registration (P _{idle})	
Sleep (S3) - WOL Enabled	W	W	W	Use for ENERGY STAR		
Sleep (S3) - WOL Disabled	W	W	W	Reference		+
Off (S5) - WOL Enabled	W	W	W	Use for ENERGY STAR	V6 registration(P _{off})	
Off (S5) - WOL Disabled	W	W	W	Use for EuP		
EPS No-load	0.070 W	0.073 W	0.129 W			H
(External power supply / char plugged in the wall outlet but disconnected from the produc	ger					
PTEC * Typical Energy Consumption	W	W	W			
TEC * Typical Energy Consumption	kWh/week	kWh/week	kWh/week			
ETEC * Annual Energy Consumption	38.79 kWh/year	38.58 kWh/year	39.53 kWh/year	$E_{TEC} = (8760/1000) \times (P_{of.} + P_{short idle} \times 0.3 + P_{long idle})$		
		WOL Enabled; P _{slee}	Sleep Mode(S3)	- WOL Enabled; P _{idle} : Idle S	tate - WOL Enabled	
Display resolution* : 1920*10	080 Megapixels					
Print Speed * : In	mages per minute					
Default time to enter energy s						
	the energy save function i	•	•			
	s the energy requirements version: Version 6.1 Tie		oluntary program category: <mark>B</mark>	/s:		
P10 Emissions						
	 Declared according to IS Mode description 	O 9296	Declared	Declared	A-weighted	
Wode	Wode description		A-weighted	sound pressure	level $L_{p{\sf Am}}$ (dB)	
			sound power	#	Bystander positions	
			level L_{WAd} (Desktop 🔀	(only if product is not	
	* 1100 1			or Desk side	operator attended)	
Idle Operation	* HDD:Idle * HDD: Operating		* 2.7 * 3.3		23.8 25.0	┦
Other mode	TIDD. Operating		0.0	3	<u></u>	
Measured accord	ing to: 🛛 ISO7779 🔲 E0	CMA-74	1			
				L _{pAm} measurement distance	ce m)	
P10.2 The product meet	P10.2 The product meets the acoustic noise requirements of the following voluntary program/s:					

Model nu	ımber *	80SX;80UF			
Issue dat	te *	2016-04-10 Logo	leno	VO .	
Product	environr	nental attributes - Market requirements (continued)	Require	ment	t met
Item		· · · · · · · · · · · · · · · · · · ·	Yes	No	n.a
	Chemic	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):			X
		Dust Ozone Styrene Benzene TVOC			
P10.5		al emission requirements of the following voluntary program/s are met for : Oust Ozone Styrene Benzene TVOC			X
		nagnetic emissions			
P10.6	program	er display meets the requirement for low frequency electromagnetic fields of the following voluntary /s: MPR-II			
P11		nable materials for printing products			
P11.1*		Data Sheet (SDS) is available for the ink/toner preparation, even if not legally required (see P4.3).			\boxtimes
P11.2*	EN1228		of		\boxtimes
P11.3*	2-sided	(duplex) printing/copying is an integrated product function.			\times
P12	Ergono	mics 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): 0.318 packaging material type(s): Polyethylene Cushions weight (kg): 0.101 packaging material type(s): Others weight (kg): 0.123			
P13.2*		plastic packaging is free from PVC.	\square		
P13.3*		media for user and product documentation (tick box): ic ☑, Paper ☑, Other ☑	- Land		
P13.4*		er user and product documentation, please specify contained percentage of post-consumer recycled			
P14		nal information (See Note B4)			
	informat knowled	Supplier makes no representations, guarantees, assurances or warranties whether express or implier ion contained in this document. All information provided by supplier in this document is provided bas ge available at the time of completion, and supplier shall have no obligation to update such information here is approximate and provided for informational purposes only. See a Lenovo Account Represertion.	ed on suppon. The in	olier's format	
P9		ergy Star Qualified Notebooks & Tablet Computers for the latest information: ww.energystar.gov/index.cfm?fuseaction=find_a_product.showProductGroup&pgw_code=C0)		
	•	<u> </u>			

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 V310-14ISK	Logo
Model Number	80SX;80UF	_
Issue Date	2016-04-10	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: 17.20					
(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: 23.54					
(g)	idle state power demand (Watts);	7.70				
(h)	sleep mode power demand (Watts);	0.88				
(i)	sleep mode with WOL enabled power demand (Watts) (where enabled);					
(j)	off mode power demand (Watts);	0.47				
(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					
(o)	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 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:							
		IEC 6262	3 / IEC I	EN50564:2011 measurement methodology				
(q)	sequence of steps for achieving a stable condition with respect to power demand::							
		EC 62623	3 / IEC E	EN50564:2011 measurement methodology				
(r)	description of how sleep and/or off mode was selected or programmed:							
				Based on user manual				
(s)	sequence of even off mode:	ents required to re	ach the	mode where the equipment automatically changes to sleep and/or				
				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):							
(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 tim	ne before the displ	ay sleep	mode is set to activate after user inactivity (in minutes):	10			
(w)	information on t	he energy-saving	potentia	l of power management functionality:				
				Based on user manual				
(x)	user information	on how to enable	the pov	wer 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:							
		2.	30V/50F	dz, Total Harmonic Distortion <2 %				
Addition N	otebook Battery	Information:						
Yes		No	n/a	This notebook computer is operated by battery/ies that cannot replaced by a non-professional user.	be accessed and			
(Battery replaceable	not user	(Battery user replaceable)		The battery[ies] in this product cannot be easily	replaced by			
				users themselves				
Additional	information							