

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/environment			
Additional information				

	pased on product specification or test results based obtained from sample testing), that the product ts given in this declaration.
Type of product *	Personal Computer
Commercial name *	Lenovo S310
Model number *	F0AF, 10151
Issue date *	2013-07-26
Intended market *	☐ Global ☐ Europe ☐ Asia, Pacific & Japan ☐ Americas ☐ Other
Additional information	Energy Star, Greenguard

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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 *	Lenovo S310	FOAF, 10151 MT:FOAF,	10151	
Issue date *	2013-07-26 2013-07-26	I	Logo	lenovo

Product	luct environmental attributes - Legal requirements			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	\square		
	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).	\boxtimes		
	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	\boxtimes		
	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	\boxtimes		
	the chain containing at least 48% per mass of chlorine in the SCCP (see legal reference).		ш	
P1.6*	Textile and leather parts with direct skin contact do not contain Tri-(2,3,-dibromopropyl)-phosphate (TRIS),			\boxtimes
	Tris-(aziridinyl)-phosphineoxide (TEPA), polybrominated biphenyl (PBB) (see legal reference).		ш	
	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			\boxtimes
	aromatic amines. (See legal reference and Note B1)	ш	ш	
P1.8*	Wooden parts do not contain arsenic and chromium as a wood preservation treatment as well as			\boxtimes
	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	\square		
1 1.0	microgram/cm ² /week (see legal reference).		ш	ш
	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):	\boxtimes		
1 1.10	http://www.lenovo.com/social_responsibility/us/en/materials.html		ш	
Do				
P2	Batteries (Vitable Indiana)			
P2.1*	If the product contains a battery or an accumulator, it is labeled with the disposal symbol and if it contains	\boxtimes		
	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			
Do ot	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	\boxtimes	Ш	
Do ot	accumulators do not contain more than 0.0005% of mercury or 0.002% of cadmium. (See legal reference)		_	_
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 and the integral of the product	1		
Do	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	\boxtimes		
	reference).			
P3.3*	If product is intended for connection to a public telecom network or contains a radio transmitter, it complies	\boxtimes		
	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).	\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			
1 4.1	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).	$\overline{}$	$\overline{}$	
			<u> </u>	
P4.3*	If the ink/toner formulation/preparation is classified as hazardous according to applicable regulations, the			\boxtimes
	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	7 🔀		
	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 Montrea			
	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 *	Lenovo S310	FOAF, 10151 MT:FOAF, 1015	1
Issue date *	2013-07-26 2013-07-26	Logo	lenovo

Product	environmental attributes - Market requirements - Environmental conscious design Re	quire	ment	met
Item	*=mandatory to fill in. Additional information regarding each item may be found under P14.	Yes	No	n.a.
P6	Treatment information			
P6.1*	Information for recyclers/treatment facilities is available (see legal reference).		Ш	
P7	Design Picaccombly recycling			
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.		\square	-
P7.3*	Plastic parts >100g consist of one material or of easily separable materials.			-
P7.4*	Plastic parts >25g have material codes according to ISO 11469 referring ISO 1043.	$\overline{\mathbb{X}}$	+	- -
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).		+	
17.0	Product lifetime		<u> </u>	
P7.7*	Upgrading can be done e.g. with processor, memory, cards or drives	\square	$\overline{}$	
P7.8*	Upgrading can be done using commonly available tools	$\overline{\mathbb{X}}$	+	╫
P7.9.				╫
P7.10	Spare parts are available after end of production for: 5 years			
1 7.10	Service is available after end of production for: 5 years Material and substance requirements			
P7.11*	Product cover/housing material type:			
	Material type: <i>ABS</i> Material type: <i>ABS+PMMA</i> Material type:			
P7.12	Electrical cable insulation materials of power cables are PVC free.		\boxtimes	
P7.13	Electrical cable insulation materials of signal cables are PVC free	Ħ	$\overline{\boxtimes}$	$\overline{\Box}$
P7.14	All cover/housing plastic parts >25g are free from chlorine and bromine.	\boxtimes	Ħ	$\overline{\Box}$
P7.15	All printed circuit boards (without components) >25g are halogen free. as defined in IEC61249-2-21. (See	Ħ		Ī
	Note B2)			
P7.16	Flame retarded plastic parts >25g in covers / housings are marked according ISO 1043-4: Marking: rear cover >ABSABS+PMMA<			
P7.17	Alt. 1			
	Chemical specifications of flame retardants in printed circuit boards >25g (without components):	\boxtimes	Ш	
	TBBPA (additive) , TBBPA (reactive) , Other; chemical name: , CAS #: 79-94-7			
	Alt. 2			
	Chemical specifications of flame retardants in printed circuit boards (without components) >25g according	\boxtimes		
	ISO 1043-4: FR-16			
P7.18	Alt. 1			
	Flame retarded plastic parts >25g contain the following flame retardant substances/preparations in concentrations above 0.1%:	Ш	\boxtimes	
	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	
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 %.			
P7.21	Of total plastic parts' weight >25g, biobased material content is 0%.			
P7.22	Light sources are free from mercury If mercury is used specify: Number of lamps: and max. mercury content per lamp: mg		Ш	Ш
P8	Batteries			
P8.1*	Battery chemical composition: Lithium Ion/Lithium Manganese Dioxide			
P8.2	Batteries meet the requirements of the following voluntary program/s: US RBRC			$\overline{\boxtimes}$

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 *	Lenovo S310	FOAF, 10151 MT:FOAF,	1015	1
Issue date *	2013-07-26 2013-07-26		Logo	lenovo

Product environmental at	tributes - Market	requirements (continued)	Requirement		
P9 Energy consumpt	tion			Yes No	n.a.	
	e following power leve	als or energy cons	umntions are re	norted: See P14		
-						
Energy mode *	Power level at 100 V AC	115 V AC	230 V AC	method *		
Peak (On-max)	W	W	W	Full load	\boxtimes	
Category B						
Idle State - WOL Enabled	11.352 W	11.484 W	11.508 W	Use for ENERGY STAR V5 registration (P _{idle})		
Sleep (S3) - WOL Enabled	1.296 W	1.296 W	1.356 W	Use for ENERGY STAR registration(P _{sleep})		
Sleep (S3) - WOL Disabled	W	W	W	Reference		
Off (S5) - WOL Enabled	1.032 W	1.032 W	1.128 W	Use for ENERGY STAR V5 registration(Poff)		
Off (S5) - WOL Disabled	0.32 W	0.33 W	0.45 W	Use for EuP		
Category C	•		·	,		
Idle State - WOL Enabled	W	W	W	Use for ENERGY STAR V5 registration(P _{idle})		
Sleep (S3) - WOL Enabled	W	W	W	Use for ENERGY STAR V5 registration (P _{sleep})		
Sleep (S3) - WOL Disabled	W	W	W	Reference		
Off (S5) - WOL Enabled	W	W	W	Use for ENERGY STAR V5 registration(Poff)		
Off (S5) - WOL Disabled	W	W	W	Use for EuP		
EPS No-load	W	W	W		\boxtimes	
(External power supply / charger plugged in the wall						
PTEC *	W	W	W			
Typical Energy Consumption						
TEC *	kWh/week	1-10/h /	1-10/1- (\boxtimes	
Typical Energy Consumption ETEC *	45.32 kWh/year	kWh/week 45.78	kWh/week 46.35	$E_{TEC} = (8760/1000) \times (P_{off} \times 0.55 + P_{sleep} \times 0.05)$		
Annual Energy Consumption	40.02 KWII/yCai	kWh/year	kWh/year	+ P _{idle} x 0.4)		
	Poff: Off Mode(\$5) -	 WOL Enabled: Psico	: Sleep Mode(S3)	- WOL Enabled; P _{idle} : Idle State - WOL Enabled		
Display resolution* : 1366 X		Siece,	p	The state of the s		
· · ·	nages per minute					
Default time to enter energy sa	= :					
	the energy save func		th the product			
	••	<u> </u>	•			
	ts the energy require version: Version 5.0			Product category:		
	NERGY STAR for Ex					
P10 Emissions						
	Declared according	g to ISO 9296	Dealared	Declared A weighted		
P10.1 Mode N	Mode description		Declared A-weighted	Declared A-weighted		
			sound power	ersound pressure level $L_{p{\sf Am}}$ (db)		
			level $L_{W\!Ad}$ ((B) Operator position Bystander positions		
				Desktop (only if product is not		
				or Desk side operator attended)		
Idle *	HDD:Idle		* 3.1	19.6		
Operation *	HDD: Operating		* 3.2	22.3		
Other mode						
Measured according	Measured according to: ISO7779 LECMA-74					
P10.2 The product meets	Other	· ·	•	with L _{pAm} measurement distance m)		
10.2 The product meets the acoustic noise requirements of the following voluntary program/s:						

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Product	environmental attributes - Market requirements (continued)	Require	ment	met		
Item		Yes	No	n.a.		
	Chemical emissions from printing products					
P10.3*	Test performed according to ECMA-328 (ISO/IEC 28360) standard, other specify:			\boxtimes		
P10.4	Typical emission rate (print phase) is (mg/h):			\boxtimes		
	Dust Ozone Styrene Benzene TVOC					
P10.5	Chemical emission requirements of the following voluntary program/s are met for :			\boxtimes		
	Dust Ozone Styrene Benzene TVOC					
	Electromagnetic emissions					
P10.6	Computer display meets the requirement for low frequency electromagnetic fields of the following voluntary program/s: MPR-II(3 pin AC adapter only)					
P11	Consumable materials for printing products					
P11.1*	A Safety Data Sheet (SDS) is available for the ink/toner preparation, even if not legally required (see P4.3).			\boxtimes		
P11.2*	Paper containing post-consumer recycled fibers can be used, provided that it meets the requirements of EN12281.					
P11.3*	2-sided (duplex) printing/copying is an integrated product function.			\boxtimes		
P12	Ergonomics for computing products					
P12.1*	The display meets the ergonomic requirements of ISO 9241-307 for visual display technologies.	\boxtimes				
P12.2*	The physical input device meets the requirements of ISO 9995 and ISO 9241-410.					
P13	Packaging and documentation					
P13.1*	Product packaging material type(s): EPE weight (kg): 0.4					
	Product packaging material type(s): PAPER weight (kg): 0.968 Product packaging material type(s): weight (kg): weight (kg):					
D42.0*	Product packaging material type(s): weight (kg):					
P13.2*	Product plastic packaging is free from PVC.			<u> </u>		
P13.3*	-17					
D40.4*	Electronic , Paper , Other .					
P13.4*	For paper user and product documentation, please specify contained percentage of post-consumer recycled fiber:			Ш		
P14	Additional information (See Note B4)					
	NOTE: Supplier makes no representations, guarantees, assurances or warranties whether express or implied, information contained in this document. All information provided by supplier in this document is provided base knowledge available at the time of completion, and supplier shall have no obligation to update such information provided here is approximate and provided for informational purposes only. See a Lenovo Account Representation information.	d on sup n. The in	plier's forma			
P9	See Energy Star Qualified Notebooks & Tablet Computers for the latest information: http://www.energystar.gov/index.cfm?fuseaction=find_a_product.showProductGroup&pgw_code=CO					
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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