

## 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 *	ThinkServer	Logo	
Company name *	Lenovo		
Contact information *	Alvin L Carter 1009 Think Place Building 2 / 5J3 Morrisville, North Carolina 27560 alcarter@lenovo.com	lenovo	
Internet site *	www.pc.ibm.com/ww/lenovo/about/environment		
Additional information			

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 *	Server			
Commercial name *	ThinkServer TS100			
Model number *	6431, 6432, 6433, 6434			
Issue date *	2010, February 22			
Intended market *	🛛 Global 🔲 Europe 🗌 Asia, Pacific & Japan 🗌 Americas 🗌 Other			
Additional information				

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Quality Control			Requirement 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 nu	umber *	ThinkServer TS100 MT: 6431, 6432, 6433,	, 6434			
Issue dat	te *	2010, February 22	Logo	lend	NO	
Product	environ	mental attributes - Legal requirements		Require		net
Item				Yes	No n	n.a.
P1		bus substances and preparations				
P1.1*	0.1% pol	s do not contain more than; 0.1% lead, 0.01% cadmium, 0.1% mercury, 0.1% he lybrominated biphenyls (PBB) or 0.1% polybrominated diphenyl ethers (PBDE). e and Note B1)		ium, 🔀		
P1.2*	Products	s do not contain Asbestos (see legal reference). ht: Legal reference has no maximum concentration value.		$\boxtimes$		
P1.3*	Products hydrobro trichloroe	s do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), pmofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbonteti ethane, methyl bromide (see legal reference). Comment: Legal reference has r ration values.				
P1.4*	Products	s do not contain more than; 0.005% polychlorinated biphenyl (PCB), 0.005% po d (PCT) in preparations (see legal reference).	lychlorinated	$\square$		
P1.5*		s do not contain more than 0.1% short chain chloroparaffins (SCCP) with 10-13 ntaining at least 48% per mass of chlorine in the SCCP (see legal reference).	carbon atoms in	the 🔀		
P1.6*	Tris-(aziı	Ind leather parts with direct skin contact do not contain Tri-(2,3,-dibromopropyl)- ridinyl)-phosphineoxide (TEPA), polybrominated biphenyl (PBB) (see legal reference has no maximum concentration values.		S),		$\boxtimes$
P1.7*		nd leather parts with direct skin contact do not contain more than 0.003% Azo or amines. (See legal reference and Note B1)	colorants that spl	lit		$\ge$
P1.8*	pentachl	parts do not contain arsenic and chromium as a wood preservation treatment a lorophenol and derivatives (see legal reference). nt: Legal reference has no maximum concentration values.	as well as			$\mathbf{X}$
P1.9*	Parts wit microgra	th direct and prolonged skin contact do not release nickel in concentrations abo am/cm <sup>2</sup> /week (see legal reference).	ove 0.5			
P1.10*	REACH	nt: Max limit in legal reference when tested according to EN1811:1998. Article 33 information about substances in articles is available at (add URL or r ww.lenovo.com/social_responsibility/us/en/environment.html	mail contact):	$\boxtimes$		
P2	Batterie					
P2.1*	more that marked v	oduct contains a battery or an accumulator, it is labeled with the disposal symbo an 0.0005% of mercury (for button cells only) by weight, or more than 0.004% or with the chemical symbol for the metal concerned, Hg or Pb. Information on pro I in user manual. (See legal reference)	f lead, it shall be			
P2.2*		ells used in the product do not contain more than 2% by weight of mercury. Oth ators do not contain more than 0.0005% of mercury or 0.002% of cadmium. (Se		e)		
P2.3*	design o	s and accumulators are easily removable by either users or service providers (a f the product). Exception: Batteries that are permanently installed for safety, per ntegrity reasons do not have to be "easily removable". (See legal reference)				
P3		EMC connection to the telephone network and labeling				
P3.1*	•	duct complies with legally required safety standards as specified (see legal refe	,	$\square$		
P3.2*	The proc	duct complies with legally required standards for electromagnetic compatibility (	see legal referen	ice). 🔀		
P3.3*		ct is intended for connection to a public telecom network or contains a radio trar ally required standards for radio and telecommunication devices (see legal refer		ies 🔀		
P3.4*	The proc	duct is labeled to show conformance with applicable legal requirements (see leg	gal reference).			
P4		nable materials				
P4.1*	legal refe	o conductor (drum, belt etc.) is used in the product, it does not contain cadmiun erence and Note B1).	`			$\ge$
P4.2*	If ink/ton	er is used in the product, it does not contain cadmium max 0.1% by weight (see	e legal reference	).		$\mathbf{X}$
P4.3*	product/	/toner formulation/preparation is classified as hazardous according to applicabl packaging is adequately labeled and a Safety Data Sheet (SDS) in accordance tents is available (see legal reference).		e		$\square$
P5		packaging				
P5.1*		ng and packaging components do not contain more than 0.01% lead, me ent chromium by weight of these together.	rcury, cadmium	and 🔀		
P5.2*	Plastic p	ackaging material is marked according to ISO 11469 referring ISO 1043 (see le	egal reference).	$\boxtimes$		
P5.3*	Protocol	duct packaging material is free from ozone depleting substances as speci (see legal reference). nt: Legal reference has no maximum concentration values.	ified in the Mon	treal 🔀		

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

Model n	<sup>umber *</sup> ThinkServer TS100 MT: 6431, 6432, 6433, 643	4	
Issue da	te * 2010, February 22 Log	<sup>jo</sup> lenovo	
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	t environmental attributes - Market requirements - Environmental conscious desig		
ltem P6	*=mandatory to fill in. Additional information regarding each item may be found under P14. Treatment information	Yes No	n.a
P6.1*	Information for recyclers/treatment facilities is available (see legal reference).		
P7	Design		
	Disassembly, recycling		
P7.1*	Parts that have to be treated separately are easily separable	$\boxtimes$	
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.		
P7.4*	Plastic parts >25g have material codes according to ISO 11469 referring ISO 1043.		
P7.5	Plastic parts are free from metal inlays or have inlays that can be removed with commonly availa	able tools.	
P7.6*	Labels are easily separable. (This requirement does not apply to safety/regulatory labels).		Γ
	Product lifetime		
P7.7*	Upgrading can be done e.g. with processor, memory, cards or drives		
P7.8*	Upgrading can be done using commonly available tools		
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:		
<b>DT</b> 10	Material type: ABS Material type: Steel Material type		_
P7.12	Electrical cable insulation materials of power cables are PVC free.		
P7.13	Electrical cable insulation materials of signal cables are PVC free		
P7.14	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 Note B2)	9-2-21. (See 📃 🔀	
P7.16	Flame retarded plastic parts >25g in covers / housings are marked according ISO 1043-4: Marking:		$\ge$
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 a ISO 1043-4: <i>Brominated Epoxy Resin See P14</i>	according	
P7.18	Alt. 1 Flame retarded plastic parts >25g contain the following flame retardant substances/pre concentrations above 0.1%:	parations in	
	Comment: No legal limits exist, this is a market requirement. Provide a list of all used flame retardants including MSDS for each flame retardant. The list r complete chemical name, CAS number and supplier. 1. Chemical name: , CAS #: , Supplier: 2. Chemical name: , CAS #: , Supplier:	nust contain	
	3. Chemical name: , CAS #: , Supplier: Alt. 2 Chemical specifications of flame retardants in plastic parts >25g according ISO 1043-4:		
P7.19	Plastic parts >25g are free from flame retardant substances/ preparations above 0.1% classified R40, R46, R48, R50, R51, R53, R60, R61 and any combination of these (See Note B3)	as R45, 🛛 🗌	
P7.20	Of total plastic parts' weight >25g, recycled material content is 0%.		
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: m		
P8	Batteries		
P8.1*	Battery chemical composition: Lithium Manganese Dioxide		

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 \* ThinkServer TS100 MT: 6431, 6432, 6433, 6434 Issue date \* 2010, February 22 Logo

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Product	Product environmental attributes - Market requirements (continued) Requirement met					
Item						n.a.
P9	<b>.</b>					
9.1	For the product the	e following power leve	els or energy consur	nptions are reporte	d:	
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-	max)	W	350 W	350 W	Full load	
Idle State		W	<mark>96</mark> W	<mark>94</mark> W	Idle State @ desktop	
Off		W	10 W	10 W	Powered/plugged in but Off	
		W	W	W		
		W	W	W		
		W	W	W		
EPS No-lo	ad	W	W	W		
charger plu	oower supply / ugged in the wall lisconnected from t.)					
P <sub>TEC</sub> Typical En	ergy Consumption	W	W	W	(Workstation Levels) $P_{TEC} = 0.35^*P_{off} + 0.10^*P_{sleep} + 0.55^*P_{ldle}$	
TEC Typical En	ergy Consumption	kWh/week	kWh/week	kWh/week		
Etec *	_	kWh/week	kWh/week	kWh/week	(Desktop, Integrated Desktop, and Notebook Levels)	
Annual En	ergy Consumption				$E_{TEC} = (8760/1000) * (P_{off} * T_{off} + P_{sleep})$ $T_{sleep} + P_{idle} * T_{idle})$	e -
Display res	solution : N	legapixels				
Print Spee	d : I	mages per minute				
Default tim	e to enter energy s	ave mode: 10 minutes	S			
P9.2*	Information about	the energy save func	tion is provided with	the product.		
P9.3*	The product meet	s the energy requirem	nents of the following	voluntary program	/s:	
	ENERGY STAR® Others specify:	version:	Product category:			
P10	Emissions					
	Noise emission	- Declared according	to ISO 9296			
P10.1	Mode	Mode description		Declared A-weighted sound power	Declared A-weighted sound pressure level $L_{p{ m Am}}$ (dB)	P1 0.1
				level $L_{WAd}$ (B)	Operator position X	
				WAd (2)	Desktop 🔀	
					or Desk side	
	Idle	*		*		$\square$
	Operation	*		*		$\square$
	Other mode					
	Measured accord	ing to: 🔀 ISO7779 🛛	ECMA-74			
		Other			L <sub>pAm</sub> measurement distance m)	
P10.2	The product meets the acoustic noise requirements of the following voluntary program/s:					

Model number * ThinkServer TS100 MT: 6431, 6432, 6433, 6434	
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	Den la contract
Product environmental attributes - Market requirements (continued)	Requirement 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:	
P10.4 Typical emission rate (print phase) is (mg/h):	
Dust Ozone Styrene Benzene TVOC	
P10.5 Chemical emission requirements of the following voluntary program/s are met for :	
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:	
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).	
P11.2* Paper containing post-consumer recycled fibers can be used, provided that it meets the requirements EN12281.	of 🖂
P11.3* 2-sided (duplex) printing/copying is an integrated product function.	
P12 Ergonomics for computing products	
P12.1* The display meets the ergonomic requirements of ISO 9241-307 for visual display technologies.	
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): <i>Corrugated cardboard</i> weight (kg): <i>5.1</i>	
Product packaging material type(s): EPP weight (kg): 0.65	
Product packaging material type(s): weight (kg):	
P13.2* Product plastic packaging is free from PVC.	
P13.3* Specify media for user and product documentation (tick box):	
Electronic 🔀, Paper 🔀, Other 📃	
P13.4* For paper user and product documentation, please specify contained percentage of post-consumer recycled fiber: 0%(Japan only 70%)	1
P14 Additional information (See Note B4)	
NOTE: Supplier makes no representations, guarantees, assurances or warranties whether express or impl	
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 informal provided here is approximate and provided for informational purposes only. See a Lenovo Account Represe	non. The information
information.	
P7.17 Product does not contain free TBBPA in printed circuit boards(without components)>25g.	

## 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