

## 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 *	ThinkCentre	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 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 *	Personal Computer					
Commercial name *	ThinkCentre M91/M91p Tower/SFF					
Model number *	<b>Tower</b> : 7049, 4468, 4473,4476, 4479, 7052, 7053, 4495, 7136, 7178, 4497, 4499, 4504, 4513, 4517, 4524, 7073, 7021, 7032, 7034; <b>SFF:</b> 7035, 4466, 4471, 4474, 4477, 4480, 4485, 7072, 7079, 7177, 4496, 4498, 4503, 4512, 4514, 4518, 4554, 7005, 7023, 7033					
Issue date *	011.02.08					
Intended market *	🔀 Global 🗌 Europe 📄 Asia, Pacific & Japan 📄 Americas 📄 Other					
Additional information	ENERGY STAR® Qualified; EPEAT Gold Rating, GREENGUARD Certification					

This is an uncontrolled copy when in printed form. Please refer to the contact information for the latest version.

Quality	Quality Control			
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		<i>ThinkCentre M91/M91p Tower/SFF</i> <u><i>Tower:</i></u> 7049, 4468, 4473, 4476, 4479, 7052, 7053, 4495, 7136, 7178, 4497, 4499, 450 4524, 7073, 7021, 7032, 7034; <u>SFF</u> : 7035, 4466, 4471, 4474, 4477, 4480, 4485, 7072, 4498, 4503, 4512, 4514, 4518, 4554, 7005, 7023, 7033	7079, 7	177, 4	1496,
Issue da	te *	2011.02.08 Logo	lend	DVO	
Product	t environ	mental attributes - Legal requirements	Require	ment	met
Item			Yes	No	n.a.
P1		us substances and preparations			
P1.1*	0.1% po	do not contain more than; 0.1% lead, 0.01% cadmium, 0.1% mercury, 0.1% hexavalent chromium, ybrominated biphenyls (PBB) or 0.1% polybrominated diphenyl ethers (PBDE). (See legal e and Note B1)			
P1.2*	Commer	o do not contain Asbestos (see legal reference). It: Legal reference has no maximum concentration value.	$\square$		
P1.3*		do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC),	$\times$		
	trichloroe	mofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrachloride, 1,1,1- ethane, methyl bromide (see legal reference). Comment: Legal reference has no maximum ation values.			
P1.4*		do not contain more than; 0.005% polychlorinated biphenyl (PCB), 0.005% polychlorinated I (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 ntaining at least 48% per mass of chlorine in the SCCP (see legal reference).	$\square$		
P1.6*	Textile a Tris-(azi	nd leather parts with direct skin contact do not contain Tri-(2,3,-dibromopropyl)-phosphate (TRIS), idinyl)-phosphineoxide (TEPA), polybrominated biphenyl (PBB) (see legal reference). It: Legal reference has no maximum concentration values.			
P1.7*	Textile a	nd leather parts with direct skin contact do not contain more than 0.003% Azo colorants that split amines. (See legal reference and Note B1)			$\boxtimes$
P1.8*	pentachl	parts do not contain arsenic and chromium as a wood preservation treatment as well as orophenol and derivatives (see legal reference). It: Legal reference has no maximum concentration values.			$\square$
P1.9*	microgra	h direct and prolonged skin contact do not release nickel in concentrations above 0.5 m/cm²/week (see legal reference). nt: Max limit in legal reference when tested according to EN1811:1998.			
P1.10*		Article 33 information about substances in articles is available at (add URL or mail contact): w.lenovo.com/social_responsibility/us/en/ThinkGreen_products.html#environment	$\boxtimes$		
P2	Batterie	S			
P2.1*	more that marked	duct contains a battery or an accumulator, it is labeled with the disposal symbol and if it contains n 0.0005% of mercury (for button cells only) by weight, or more than 0.004% of lead, it shall be with the chemical symbol for the metal concerned, Hg or Pb. Information on proper disposal is in user manual. (See legal reference)			
P2.2*		ells used in the product do not contain more than 2% by weight of mercury. Other batteries or ators do not contain more than 0.0005% of mercury or 0.002% of cadmium. (See legal reference)	$\square$		
P2.3*	design o	and accumulators are easily removable by either users or service providers (as dependent on the f the product). Exception: Batteries that are permanently installed for safety, performance, medical negrity reasons do not have to be "easily removable". (See legal reference)			
P3		EMC connection to the telephone network and labeling			
P3.1*	The proc	luct complies with legally required safety standards as specified (see legal reference).	$\boxtimes$		
P3.2*	The proc	luct complies with legally required standards for electromagnetic compatibility (see legal reference).			Π
P3.3*		t is intended for connection to a public telecom network or contains a radio transmitter, it complies Ily required standards for radio and telecommunication devices (see legal reference).			
P3.4*		luct is labeled to show conformance with applicable legal requirements (see legal reference).	$\boxtimes$		
P4	Consum	able materials			
P4.1*		o conductor (drum, belt etc.) is used in the product, it does not contain cadmium max 0.01% (see erence and Note B1).			$\boxtimes$
P4.2*	If ink/ton	er is used in the product, it does not contain cadmium max 0.1% by weight (see legal reference).			$\square$
P4.3*	product/	/toner formulation/preparation is classified as hazardous according to applicable regulations, the backaging is adequately labeled and a Safety Data Sheet (SDS) in accordance with these ents is available (see legal reference).			
P5	Product	packaging			
P5.1*	hexavale	ing and packaging components do not contain more than 0.01% lead, mercury, cadmium and ant chromium by weight of these together.	1		
P5.2*	Plastic p	ackaging material is marked according to ISO 11469 referring ISO 1043 (see legal reference).	$\boxtimes$		
P5.3*	Protocol	duct packaging material is free from ozone depleting substances as specified in the Montrea (see legal reference). it: Legal reference has no maximum concentration values.	I 🔀		

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

Model number *	ThinkCentre M91/M91p Tower/SFF			
	Tower: 7049, 4468, 4473, 4476, 4479, 7052, 7053, 4495, 7136, 7178, 4497, 4499, 4504, 4513, 4517,			
	4524, 7073, 7021, 7032, 7034; SFF: 7035, 4466, 4471, 4474, 4477, 4480, 4485, 7072, 7079, 7177, 4496,			
	4498, 4503, 4512, 4514, 4518, 4554, 7005, 7023, 7033			
Issue date *	2011.02.08	Logo	lenovo	

		Require		
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).			
P7	Design			
	Disassembly, recycling			
P7.1*	Parts that have to be treated separately are easily separable	$\square$		
P7.2*	Plastic materials in covers/housing have no surface coating.		$\boxtimes$	
P7.3*	Plastic parts >100g consist of one material or of easily separable materials.	$\boxtimes$		
P7.4*	Plastic parts >25g have material codes according to ISO 11469 referring ISO 1043.	$\square$		
P7.5	Plastic parts are free from metal inlays or have inlays that can be removed with commonly available tools.		Ē	
P7.6*	Labels are easily separable. (This requirement does not apply to safety/regulatory labels).		Ħ	
	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>D7</b> 40	Material type: ABS Material type: PC/ABS Material type: Steel			
P7.12	Electrical cable insulation materials of power cables are PVC free.			
P7.13	Electrical cable insulation materials of signal cables are PVC free		$\square$	
P7.14	All cover/housing plastic parts >25g are free from chlorine and bromine.	$\boxtimes$		
P7.15	All printed circuit boards (without components) >25g are halogen free. as defined in IEC61249-2-21. (See Note B2)	•	$\square$	
P7.16	Flame retarded plastic parts >25g in covers / housings are marked according ISO 1043-4: Marking:	$\boxtimes$		
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: <b>Brominated Epoxy Resin See P14</b>			
P7.18	Alt. 1 Flame retarded plastic parts >25g contain the following flame retardant substances/preparations in concentrations above 0.1%:	n 🗌		
	<ul> <li>Comment: No legal limits exist, this is a market requirement.</li> <li>Provide a list of all used flame retardants including MSDS for each flame retardant. The list must contain complete chemical name, CAS number and supplier.</li> <li>1. Chemical name: , CAS #: , Supplier:</li> <li>2. Chemical name: , CAS #: , Supplier:</li> </ul>	ı		
			_	_
	3. Chemical name: , CAS #: , Supplier: Alt. 2 Chemical specifications of flame retardants in plastic parts >25g according ISO 1043-4:			
P7.19	Alt. 2			
P7.19 P7.20	Alt. 2 Chemical specifications of flame retardants in plastic parts >25g according ISO 1043-4: Plastic parts >25g are free from flame retardant substances/ preparations above 0.1% classified as R45,			
	Alt. 2 Chemical specifications of flame retardants in plastic parts >25g according ISO 1043-4: 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	Alt. 2         Chemical specifications of flame retardants in plastic parts >25g according ISO 1043-4:         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)         Of total plastic parts' weight >25g, recycled material content is <i>Tower: 42.1%, SFF: 37.6%</i>			
P7.20 P7.21 P7.22	Alt. 2       Chemical specifications of flame retardants in plastic parts >25g according ISO 1043-4:         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)         Of total plastic parts' weight >25g, recycled material content is <i>Tower: 42.1%, SFF: 37.6%</i> Of total plastic parts' weight >25g, biobased material content is <i>0</i> %.			
P7.20 P7.21	Alt. 2       Chemical specifications of flame retardants in plastic parts >25g according ISO 1043-4:         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)         Of total plastic parts' weight >25g, recycled material content is <i>Tower: 42.1%, SFF: 37.6%</i> Of total plastic parts' weight >25g, biobased material content is <i>0</i> %.         Light sources are free from mercury			

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 *	ThinkCentre M91/M91p Tower/SFF				
	Tower: 7049, 4468, 4473, 4476, 4479, 7052, 7053, 4495, 7136, 7178, 4497, 4499, 4504, 4513, 4517,				
	4524, 7073, 7021, 7032, 7034; SFF: 7035, 4466, 4471, 4474, 4477, 4480, 4485, 7072, 7079, 7177, 4496,				
	4498, 4503, 4512, 4514, 4518, 4554, 7005, 7023, 7033				
Issue date *	2011.02.08	Logo	lenovo		

Product environmental at	tributes - Market	requirements (co	ontinued)	Requirement n	net
Item				Yes No	n.a
P9 Energy consump					
	e following power lev oped w/ WOL Enable		mptions are reporte	a: See P14	
Energy mode *	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 *	
Category D				· · ·	
Idle State - WOL Enabled	<b>52.22</b> W	51.50W	50.73 W	Use for Energy Star V5 registration(Pidle)	Г
Sleep (S3) - WOL Enabled	1.90 W	1.91 W	2.20 W	Use for Energy Star V5 registration(P <sub>sleep</sub> )	
Off (S5) - WOL Enabled	0.96W	0.96 W	1.16 W	Use for Energy Star V5 registration(Poff)	Γ
Peak (On-max)	159.68W	155.36w	<b>151.07</b> w	Full load	Γ
Category C					_
Idle State - WOL Enabled	<b>45.92</b> W	<b>44.8</b> W	<b>44.63</b> W	Use for Energy Star V5 registration(P <sub>idle</sub> )	Г
Sleep (S3) - WOL Enabled	1.84W	1.74 W	2.10 W	Use for Energy Star V5 registration(P <sub>sleep</sub> )	F
Off (S5) - WOL Enabled	0.92 W	0.93W	1.11 W	Use for Energy Star V5 registration(P <sub>ott</sub> )	누
Peak (On-max)	143.51W	119.22W	138.89W	Full load	+
Category B		-			<u> </u>
Idle State - WOL Enabled	50.32 W	54.04W	48.97 W	Use for Energy Star V5 registration(P <sub>idle</sub> )	
Sleep (S3) - WOL Enabled	1.45 W	1.48 W	1.72 W	Use for Energy Star V5 registration(P <sub>sleep</sub> )	╞
Off (S5) - WOL Enabled	0.73W	0.76 W	0.97 W	Use for Energy Star V5 registration(P <sub>sleep</sub> )	-
Peak (On-max)	135.86W	133.19W	131.16W	Full load	_
; ;	133.0000	133.19	131.1000		
Category A					_
Idle State - WOL Enabled	47.52W	51.24W	46.17 W	Use for Energy Star V5 registration(P <sub>idle</sub> )	
Sleep (S3) - WOL Enabled	1.45W	1.48 W	1.72 W	Use for Energy Star V5 registration(P <sub>sleep</sub> )	
Off (S5) - WOL Enabled	0.73W	0.76W	0.97 W	Use for Energy Star V5 registration(P <sub>off</sub> )	
Peak (On-max)	94.64W	93.67W	92.47W	Full load	
EPS No-load	W	W	W		
(External power supply / charger plugged in the wall outlet but disconnected from	vv	vv			
TEC Typical Energy Consumption	kWh/week	kWh/week	kWh/week		
ETEC * Annual Energy Consumption	Cat D: 188.44; Cat C:166.14; Cat B: 180.47; Cat A: 170.66; kWh/year	Cat D: 185.92; Cat C: 162.22; Cat B: 193.67; Cat A: 183.85; kWh/year	Cat D: 184.31; Cat C: 162.65; Cat B: 177.02; Cat A: 167.21 kWh/year	$E_{TEC} = (8760/1000) \times (P_{off} \times 0.6 + P_{sleep} \times 0.1 + P_{idle} \times 0.3)$	
	Poff: Off Mode(S5) -	WOL Enabled; P <sub>sleep</sub> :	Sleep Mode(S3) - WO	DL Enabled; P <sub>idle</sub> : Idle State - WOL Enabled	
Display resolution : M	egapixels				
Print Speed :	Images per minu	te		1	$\geq$
Default time to enter energy sa	ave mode: 30 minute	s			Ē
P9.2* Information about	the energy save fund	tion is provided with	the product.		Ē
	the energy requirenversion: Version 5.2				

Model number *	ThinkCentre M91/M91p Tower/SFF				
	Tower: 7049, 4468, 4473, 4476, 4479, 7052, 7053, 4495, 7136, 7178, 4497, 4499, 4504, 4513, 4517,				
	4524, 7073, 7021, 7032, 7034; SFF: 7035, 4466, 4471, 4474, 4477, 4480, 4485, 7072, 7079, 7177, 4496,				
	4498, 4503, 4512, 4514, 4518, 4554, 7005, 7023, 7033				
Issue date *	2011.02.08	Logo	lenovo		

P10	Emissions						
	Noise emission – Declared according to ISO 9296						
P10.1	Mode	Mode description	Declared	Declared A	A-weighted		
			A-weighted sound power	sound pressure I	evel $L_{p{\sf Am}}$ (dB)		
			level $L_{WAd}$ (B)	Operator position 🔀	Bystander positions		
			, , , , , , , , , , , , , , , , , , ,	Desktop 🔀			
				or Desk side	(only if product is not operator attended)		
	Idle	* HDD: Idle	* Tower: 3.5	Towe	er: 24		
			SFF: 3.3	SFI	F:24		
	Operation	* HDD: Operating	* Tower: 3.8		er: 26		
			SFF: 3.5	SFF	<b>∹ 26</b>	_	
	Other mode						
	Measured accord	ding to: 🔀 ISO7779 🗌 ECMA-74					
		Other (only if not covere	d by ECMA-74 wi	th L <sub>pAm</sub> measurement dis	stance m)		
P10.2	The product mee	ts the acoustic noise requirements of the fo	llowing voluntary	program/s:		$\boxtimes$	

Product	Product environmental attributes - Market requirements (continued)					
Item		Yes	No	n.a.		
	Chemical emissions from printing products					
P10.3*	Test performed according to ECMA-328 (ISO/IEC 28360) standard 🔲, other specify:			$\mathbb{X}$		
P10.4	Typical emission rate (print phase) is (mg/h):			$\times$		
	Dust Ozone Styrene Benzene TVOC					
P10.5	Chemical emission requirements of the following voluntary program/s are met for :			X		
	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).			$\boxtimes$		
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.			$\times$		
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.	$\square$				
P13	Packaging and documentation					
P13.1*	Product packaging material type(s): Corrugated paper weight (kg): Tower - 1.53, SFF - 1.19					
	Product packaging material type(s): Arcel weight (kg): Tower - 0.30, SFF - 0.18					
P13.2*	Product packaging material type(s): weight (kg): Product plastic packaging is free from PVC.	$\square$				
P13.3*	Specify media for user and product documentation (tick box):					
P13.3	Electronic , Paper , Other					
P13.4*	For paper user and product documentation, please specify contained percentage of post-consumer recycled					
1 10.4	fiber: 0% (Japan only 70%)					
P14	Additional information (See Note B4)	· ·				
	NOTE: Supplier makes no representations, guarantees, assurances or warranties whether express or implie					
	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			<b>~</b>		
	provided here is approximate and provided for informational purposes only. See a Lenovo Account Represen			on		
	information.					
P7.17	Product does not contain free TBBPA in printed circuit boards(without components)>25g.					
P9	See Energy Star Qualified Computers for the latest information:					
	http://www.energystar.gov/index.cfm?fuseaction=find_a_product.ShowProductGroup&pgw_code=C0	)				

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