

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 / 5J3 Morrisville, North Carolina 27560	lenovo.	
Internet site *	alcarter@lenovo.com	f html	
Additional information	http://www.lenovo.com/social_responsibility/us/en/environment.html 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 *	Personal Computer			
Commercial name *	ThinkCentre Edge 72 SFF			
Model number *	SFF-3493,3496,3497			
Issue date *	2012.05.23			
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		
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).		

Model number *	ThinkCentre Edge 72 SFF	M/T:3493,3496,3497	
Issue date *	2012.05.23	Logo	lenovo.

Product	ct 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			
	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),			
	hydrobromofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrachloride, 1,1,1-			
	trichloroethane, methyl bromide (see legal reference). Comment: Legal reference has no maximum			
D4 4*	concentration values.			
P1.4*	Products do not contain more than; 0.005% polychlorinated biphenyl (PCB), 0.005% polychlorinated	\boxtimes	Ш	
P1.5*	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	Ш	
P1.6*	the chain containing at least 48% per mass of chlorine in the SCCP (see legal reference). Textile and leather parts with direct skin contact do not contain Tri-(2,3,-dibromopropyl)-phosphate (TRIS),		$\overline{}$	
F 1.0	Tris-(aziridinyl)-phosphineoxide (TEPA), polybrominated biphenyl (PBB) (see legal reference).		Ш	\boxtimes
	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		$\overline{}$	\square
	aromatic amines. (See legal reference and Note B1)		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).		ш	
	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	\boxtimes		
	microgram/cm ² /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):	\boxtimes		
	http://www.lenovo.com/social_responsibility/us/en/ThinkGreen_products.html#environment	_		_
P2	Batteries			
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			
	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)			
P2.3*	Batteries and accumulators are easily removable by either users or service providers (as dependent on the		Ш	Ш
	design of the product). Exception: Batteries that are permanently installed for safety, performance, medical and the interest of the safety interest of the safety in the	ıl		
D0	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).		Щ.	_ <u>_</u> _
P3.2*	The product complies with legally required standards for electromagnetic compatibility (see legal	\boxtimes		
D0.0*	reference).			
P3.3*	If product is intended for connection to a public telecom network or contains a radio transmitter, it complies			
P3.4*	with legally required standards for radio and telecommunication devices (see legal reference).		_	_
	The product is labeled to show conformance with applicable legal requirements (see legal reference).		<u>ш</u>	
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			\boxtimes
	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).			\boxtimes
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 an	d 🔀		
DE 0*	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	ıl 🔀		
	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 *	ThinkCentre Edge 72 SFF	M/T:3493,3496,3497	
Issue date *	2012.05.23	Logo	lenovo.

Product	environmental attributes - Market requirements - Environmental conscious design	equire	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).	\boxtimes		
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.		$\overline{\mathbb{X}}$	Ħ
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 available tools.	\boxtimes		
P7.6*	Labels are easily separable. (This requirement does not apply to safety/regulatory labels).	\boxtimes		
	Product lifetime			
P7.7*	Upgrading can be done e.g. with processor, memory, cards or drives	\boxtimes		
P7.8*	Upgrading can be done using commonly available tools	\boxtimes		
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:			
	Material type: ABS Material type: ABS+PMMA Material type: Steel			
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		\boxtimes	
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)			
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: <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. 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. 1. Chemical name: , CAS #: , Supplier: 2. Chemical name: , CAS #: , Supplier:			
	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 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 0%			
P7.21	Of total plastic parts' weight >25g, biobased material content is %.			
P7.22	Light sources are free from mercury	\boxtimes		
P8	Batteries			
P8.1*	Battery chemical composition:			\boxtimes
P8.2	Batteries meet the requirements of the following voluntary program/s:			$\overline{\mathbf{X}}$

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 Edge 72 SFF	M/T:3493,3496,3497	
Issue date *	2012.05.23	Logo	lenovo.

Product environmental a	ttributes - Market	requirements (co	ontinued)	Requirement	met
Item				Yes No	n.a.
P9 Energy consumption 9.1 For the product the following power levels or energy consumptions are reported: See P14					
The product is shi	pped w/ WOL Enable	ed.			
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	31.33 W	31.20 W	31.24 W	Use for Energy Star V5 registration(P _{idle})	
Sleep (S3) - WOL Enabled	1.55W	1.56 W	1.71W	Use for Energy Star V5 registration(P _{sleep})	
Off (S5) - WOL Enabled	0.61W	0.61W	0.74 W	Use for Energy Star V5 registration(P _{off})	
Peak (On-max)	88.76 W	89.78 w	87.99 w	Full load	
Category C					
Idle State - WOL Enabled	31.33 W	31.20 W	31.24 W	Use for Energy Star V5 registration(P _{idle})	
Sleep (S3) - WOL Enabled	1.55W	1.56W	1.71W	Use for Energy Star V5 registration(P _{sleep})	
Off (S5) - WOL Enabled	0.61W	0.61 W	0.74 W	Use for Energy Star V5 registration(Poff)	
Peak (On-max)	88.76 W	89.78 w	87.99 w	Full load	
Category B					
Idle State - WOL Enabled	30.50W	30.55W	30.18 W	Use for Energy Star V5 registration(P _{idle})	
Sleep (S3) - WOL Enabled	1.59W	1.60 W	1.75W	Use for Energy Star V5 registration(P _{sleep})	
Off (S5) - WOL Enabled	0.61W	0.62 W	0.74 W	Use for Energy Star V5 registration(Poff)	
Peak (On-max)	85.11 W	85.15 W	86.80W	Full load	
Category A					
Idle State - WOL Enabled	30.41 W	30.08W	30.20 W	Use for Energy Star V5 registration(P _{idle})	
Sleep (S3) - WOL Enabled	1.58W	1.58W	1.74W	Use for Energy Star V5 registration(P _{sleep})	$\overline{\Box}$
Off (S5) - WOL Enabled	0.61W	0.62 W	0.74 W	Use for Energy Star V5 registration(Poff)	\Box
Peak (On-max)	70.22 W	68.33W	69.77 W	Full load	ī
EDO N. I. I	144				Ę
EPS No-load TEC	W kWh/week	W kWh/week	W kWh/week		
Typical Energy Consumption	KVVII/WEEK	KVVII/WEEK	KVVII/WEEK		
ETEC *	Cat D: 113.40;	Cat D: 112.99;	Cat D: 113.78;	$E_{TEC} = (8760/1000) \times (P_{off} \times 0.6 + P_{sleep} \times 0.00) \times (P_{off} \times 0.6 + P_{sleep} \times 0.00)$	
Annual Energy Consumption	Cat C: 113.40; Cat B: 116.69;	Cat C: 112.99; Cat B: 117.00;	Cat C: 113.78; Cat B: 117.30;	$0.1 + P_{idle} \times 0.3$	
	Cat A: 110.19	Cat A: 109.08	Cat A: 110.17		
	kWh/year	kWh/year	kWh/year		
Display resolution : N	P _{off} : Off Mode(S5) - I legapixels	WOL Enabled; P _{sleep} : S	Sleep Mode(S3) - WOL	L Enabled; P _{idle} : Idle State - WOL Enabled	
Print Speed :	Images per minu	uto.			
Default time to enter energy s					
<u> </u>	the energy save fund		the product		
	s the energy requirer	•	·		
ENERGY STAR®	version: Version 5.2			,, ₀ .	
Others specify:					
P10 Emissions	- Declared according	to ISO 0206			
	Mode description	10 100 3230	Declared	Declared A-weighted	
			A-weighted sound power	sound pressure level $L_{p{\sf Am}}$ (dB)	
			level L_{WAd} (B)	Operator position Bystander positions	1
				Desktop X	
				or Desk side (only if product is not operator attended)	
Idle	* HDD: Idle		* 3.3	23	
Operation	* HDD: Operating		* 3.5	25	
Other mode	. 🔽 :				-
Measured accordi	ng to: ISO7779 Cother	ECMA-74	ed by ECMA 74 with	h I . magaurament distance m'	
P10.2 The product meet	s the acoustic noise	` •	•	h L _{pAm} measurement distance m) program/s:	

Model number *	ThinkCentre Edge 72 SFF	M/T:3493,3496,3497	
Issue date *	2012.05.23	Logo	lenovo

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	\boxtimes			
D44	program/s:				
P11 P11.1*	Consumable materials for printing products		_		
	A Safety Data Sheet (SDS) is available for the ink/toner preparation, even if not legally required (see P4.3).	<u></u>	Щ.		
P11.2*	Paper containing post-consumer recycled fibers can be used, provided that it meets the requirements of EN12281.		Ш	\boxtimes	
P11.3*	2-sided (duplex) printing/copying is an integrated product function.		П	\square	
P12	Ergonomics for computing products				
P12.1*	The display meets the ergonomic requirements of ISO 9241-307 for visual display technologies.			П	
P12.2*	The physical input device meets the requirements of ISO 9995 and ISO 9241-410.			Ħ	
P13	Packaging and documentation				
P13.1*	Product packaging material type(s): Corrugated paper weight (kg): 1.125				
	Product packaging material type(s): Fabricated PE weight (kg): 0.165				
D. () 0.1	Product packaging material type(s): HDPE weight (kg):0.016				
P13.2*	Product plastic packaging is free from PVC.	\boxtimes		Ц	
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				
P14	fiber: 0% (Japan only 70%) Additional information (See Note B4)				
F 14	NOTE: Supplier makes no representations, guarantees, assurances or warranties whether express or implie	d regard	ing the		
	information contained in this document. All information provided by supplier in this document is provided based on supplier's				
	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 Represent	ative for	more		
	information.				
P7.17	Product does not contain free TBBPA in printed circuit boards(without components)>25g.	lada um			
P9	See Energy Star Qualified (insert appropriate Product type; i.e. Desktop, Notebook, etc.) for the latest http://downloads.energystar.gov/bi/qplist/laptops_prod_list.xls (insert appropriate web url)	intormat	ion:		
I	mapina minuta di mana				

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