


THE ECO DECLARATION



ECMA/TC38-TG3/2015/026
(Rev. 1 – 15 April 2015)

Annex B2 - Product environmental attributes Computer Monitors


The declaration may be published only when all rows and/or fields marked with * are filled-in (n.a. for not applicable). Additional information regarding each item may be found under P15.

Brand *	<i>Lenovo</i>	
Company name *	<i>Lenovo</i>	
Contact information * e-mail address	<i>Lenovo Global Environmental Affairs Alvin L Carter alcarter@lenovo.com</i>	
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 *	<i>Monitor</i>
Commercial name *	<i>ThinkVision L24e-20</i>
Model number *	<i>65DF</i>
Issue date *	<i>2018/5/14</i>
Intended market *	<input checked="" type="checkbox"/> Global <input type="checkbox"/> Europe <input type="checkbox"/> Asia, Pacific & Japan <input type="checkbox"/> Americas <input type="checkbox"/> Other
Additional information	


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

<p>About Annex B2</p> <p>Annex B2 reflects Product environmental attributes relevant for Computers and Computer Monitors. The following items from the ECMA-370 Main body are not shown in the template:</p> <p>P4.1 – P4.3 Consumable materials P9.1 TEC and Print speed P10.2 - P10.3 Chemical emissions from printing products P11.1 - P11.3 Consumable materials for printing products.</p>
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Model number *	65DF	Logo	
Issue date *	2018/5/14		

Product environmental attributes - Legal requirements		Requirement met		
Item		Yes	No	n.a.
P1 Hazardous substances and preparations				
P1.1*	Products do comply with current European RoHS Directive. (See legal reference and NOTE B1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
P1.2*	Products do not contain Asbestos (see legal reference). Comment: Legal reference has no maximum concentration value.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
P1.3*	Products do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), hydrobromofluorocarbons (HBFC), hydrochlorofluorocarbons (HCFC), Halons, carbontetrachloride, 1,1,1-trichloroethane, methyl bromide (see legal reference). Comment: Legal reference has no maximum concentration values.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
P1.4*	Products do not contain more than; 0,005% polychlorinated biphenyl (PCB), 0,005% polychlorinated terphenyl (PCT) in preparations (see legal reference).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
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).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
P1.6*	Parts with direct and prolonged skin contact do not release nickel in concentrations above 0,5 µg/cm ² /week (see legal reference). Comment: Max limit in legal reference when tested according to EN1811:2011-5.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P1.7*	REACH Article 33 information about substances in articles is available at (add URL or mail contact): http://www.lenovo.com/social_responsibility/us/en/environment.html	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P2 Batteries				
P2.1*	If the product contains a battery or an accumulator, the battery/accumulator is labeled with the disposal symbol. Information on proper disposal is provided in user manual. (See legal reference)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P2.2*	Batteries or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadmium. (See legal reference)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P2.3*	Batteries and accumulators are readily removable. (See legal reference)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P3 Conformity verification & Eco design (ErP)				
P3.1*	The product is CE-marked to show conformance with applicable legal requirements (see legal reference). The Declaration of Conformity can be requested at (add link or e-mail address):	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P3.2*	The product complies with the Eco design requirements for energy-related products, (see legal reference). Required information is; <input checked="" type="checkbox"/> given in item P15 or added to this document, <input type="checkbox"/> available at (add URL):	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
P5.2*	The packaging materials are marked with abbreviations and numbers indicating the nature of the material(s) used (see legal reference).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P6 Treatment information				
P6.1*	Information for recyclers/treatment facilities is available (see legal reference).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

NOTE B1 Restriction applies to the homogeneous material, unless other specified and expressed in weight %. Stating "Yes" means that the product is compliant with the mandatory requirements.

Model number *	65DF	Logo	
Issue date *	2018/5/14		

Product environmental attributes - Market requirements (See General NOTE GN below)		Requirement met		
- Environmental conscious design		Yes	No	n.a.
Item	*=mandatory to fill in. Additional information regarding each item may be found under P14.			
P7	Design			
	Disassembly, recycling			
P7.1*	Parts that have to be treated separately are easily separable	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.2*	Plastic materials in covers/housing have no surface coating.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
P7.3*	Plastic parts > 100 g consist of one material or of easily separable materials.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.4*	Plastic parts > 25 g have material codes according to ISO 11469 referring ISO 1043-4.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.5	Plastic parts are free from metal inlays or have inlays that can be removed with commonly available tools.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.6*	Labels are easily separable. (This requirement does not apply to safety/regulatory labels).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Product lifetime			
P7.7*	Upgrading can be done e.g. with processor, memory, cards or drives	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P7.8*	Upgrading can be done using commonly available tools	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P7.9	Spare parts are available after end of production for: 5 years			<input type="checkbox"/>
P7.10	Service is available after end of production for: 5 years			<input type="checkbox"/>
	Material and substance requirements			
P7.11*	Product cover/housing material type (e.g. plastics, metal, aluminum): Material type: ABS Material type: PC Material type:			
P7.12	Insulation materials of external electrical cables are PVC free.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
P7.13	Insulation materials of internal electrical cables are PVC free.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
P7.14	External plastic casing/cover parts > 25 g contain no more than 0,1% weight (1000 ppm) bromine and 0,1% weight (1000 ppm) chlorine attributable to brominated flame retardants, chlorinated flame retardants, and polyvinyl chloride or 0,3% weight (3000 ppm) bromine and 0,3% weight (3000 ppm) chlorine in parts containing more than 25% post-consumer recycled content.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P7.15	Printed circuit boards, PCBs (without components) are low halogen: all <input checked="" type="checkbox"/> PCBs > 25 g <input type="checkbox"/> are low halogen as defined in IEC 61249-2-21. (See 1NOTE B2)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
P7.16	Flame retarded plastic parts > 25 g in covers / housings are marked according ISO 1043-4: Marking:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P7.17	<u>Alt. 1:</u> Chemical specifications of flame retardants in printed circuit boards > 25 g (without components): <input type="checkbox"/> TBBPA (additive), <input type="checkbox"/> TBBPA (reactive) (See NOTE B3), <input type="checkbox"/> Other: chemical name , CAS #: <u>Alt. 2:</u> Chemical specifications of flame retardants in printed circuit boards (without components) > 25 g according ISO 1043-4:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
P7.18	<u>Alt. 1:</u> Flame retarded plastic parts > 25 g contain the following flame retardant substances/preparations in concentrations above 0,1%: 1. Chemical name: , CAS #: (See NOTE B4) 2. Chemical name: , CAS #: " 3. Chemical name: , CAS #: " <u>Alt. 2:</u> Chemical specifications of flame retardants in plastic parts > 25 g according ISO 1043-4:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
P7.19	In plastic parts > 25 g, flame retardant substances/preparations above 0,1% are used which have been assigned the following Risk phrases; and Hazard statements: The source(s) for these classifications is/are found at (add URL(s)): , (See note B5)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
P7.20*	Postconsumer recycled plastic material content is used in the product (See Note B6): If YES; at least one of the two alternatives below shall be answered; a) Of total plastic parts' weight > 25 g, the postconsumer recycled plastic material content (calculated as a percentage of total plastic by weight) is 41.09% . (EPEAT calculation) / 85% (TCO calculation) or b) The weight of recycled material is 535.5 g .	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>


GENERAL NOTE Standard references should direct to the latest version of a standard. If an older version of a standard is used, section P15 shall be used for explanation.

NOTE B2 IEC 61249-2-21 defines maximum limits of 900 ppm for each of the substances chlorine and bromine and a maximum limit of 1500ppm of these substances combined. The standard does not address fluorine, iodine and astatine which are included in the group of halogens.

NOTE B3 and B4 A Guidance document on Chemical substances is available; see <http://www.ecma-international.org/publications/standards/Ecma-370.htm>

NOTE B5 If a certain substance has been assigned a certain risk phrases / hazard statement in the referenced source, this does not necessarily mean the substance has been tested for all of the hazards referred to by a certain customer.

NOTE B6 Applies to a product containing plastic parts whose combined weight exceeds 100 g with the exception of printed circuit boards, cables, connectors and electronic components and bio-based plastic material.

Model number *	65DF	Logo	
Issue date *	2018/5/14		

Product environmental attributes - Market requirements (continued)		Requirement met		
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Item		Yes	No	n.a.
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Material and substance requirements (continued)				
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P7.21*	Biobased plastic material content is used in the product (See NOTE B7): If YES; at least one of the two alternatives below shall be answered; a) Of total plastic parts' weight > 25 g, the biobased plastic material content (calculated as a percentage of total plastic by weight) is 0%. or b) The weight of the biobased plastic material is 0g.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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P7.22*	Light sources are free from mercury, i.e. less than 0,1 mg/lamp. If mercury is used specify: Number of lamps: _____ and maximum mercury content per lamp: _____ mg	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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P8 Batteries				
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P8.1*	Battery chemical composition:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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P9 Energy consumption (See NOTE B8)				
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P9.1 For the product the following power levels or energy consumptions are reported:

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 *
ENERGY STAR® On Mode* (System Idle)	16.7W	16.9W	16.7W	ENERGY STAR® Program Requirements for Computer Monitors: Ver. 7.0
ENERGY STAR® Low Power Sleep Mode*	0.1W	0.1W	0.2W	ENERGY STAR® Program Requirements for Computer Monitors: Ver. 7.0
ENERGY STAR® Off / Apparent Off Mode*	0.09W	0.09W	0.13W	ENERGY STAR® Program Requirements for Computer Monitors: Ver. 7.0

PTEC *	W	W	W	<input type="checkbox"/>
Typical Energy Consumption				

ETEC *	44.45kWh/year	44.97 kWh/year	44.74 kWh/year	$E_{TEC} = (8760/1000) \times (P_{off} \times 0.6 + P_{sleep} \times 0.1 + P_{idle} \times 0.3)$	<input type="checkbox"/>
Annual Energy Consumption					

External Power Supply Efficiency Level (International Efficiency Marking Protocol) * :	<input type="checkbox"/>
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Display resolution* : 1920*1080 megapixels	ENERGY STAR® Program Requirements for Computer Monitors: Ver. 7.0
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Default time to enter energy save mode: 15 seconds	ENERGY STAR® Program Requirements for Computer Monitors: Ver. 7.0
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P9.2* Information about the energy save function is provided with the product.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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P9.3* The product meets the energy requirements of the following voluntary program/s: ENERGY STAR® version: 7.0 Product category: Display.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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P10 Emissions				
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Noise emission – Declared according to ISO 9296 (See NOTE B9)				
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P10.1	Mode	Mode description	Statistical upper limit A-weighted sound power level, $L_{WA,c}$ (B)	
	Idle	* HDD: Idle	*	<input type="checkbox"/>
	Operation	* HDD: Operating	*	<input type="checkbox"/>
	Other mode	Declared A-weighted sound pressure level (dB) L_{pAm}	(operator position desktop – idle)	
	Other mode	Declared A-weighted sound pressure level (dB) L_{pAm}	(operator position desktop – operating)	
Measured according to: <input checked="" type="checkbox"/> ISO 7779 <input type="checkbox"/> ECMA-74 <input type="checkbox"/> Other (only if not covered by ECMA-74)				

NOTE B7 The following is to be excluded from the calculation of percentage: printed circuit boards, labels, cables, connectors and electronic components and postconsumer recycled plastic

NOTE B8 A Guidance document on Energy Efficiency is available; see <http://www.ecma-international.org/publications/standards/Ecma-370.htm>

NOTE B9 A Guidance document on Acoustic Noise is available; see <http://www.ecma-international.org/publications/standards/Ecma-370.htm>

Model number *	65DF	Logo	
Issue date *	2018/5/14		

Product environmental attributes - Market requirements (continued)		Requirement met		
Item		Yes	No	n.a.
Electromagnetic emissions				
P10.4	Computer display meets the requirement for low frequency electromagnetic fields of the following voluntary program(s):	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P12 Ergonomics for computing products				
P12.1*	The display meets the ergonomic requirements of ISO 9241-307 for visual display technologies.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P12.2*	The physical input device meets the requirements of ISO 9995 and ISO 9241-410.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P13 Packaging and documentation				
P13.1*	Product packaging material type(s): EPS weight (kg): 0.22 Product packaging material type(s): PE Bag weight (kg): 0.03 Product packaging material type(s): Paper weight (kg): 0.02 Product packaging material type(s): Carton weight (kg): 0.82			
P13.2*	Product plastic primary packaging is free from PVC.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P13.3*	For product primary corrugated fiberboard packaging, specify the contained percentage of minimum post-consumer recovered fiber content: 0 %			<input type="checkbox"/>
P13.4*	Specify media for user and product documentation (tick box): <input checked="" type="checkbox"/> Electronic, <input checked="" type="checkbox"/> Paper, <input type="checkbox"/> Other			<input type="checkbox"/>
P13.5	(Please only complete this item if paper documentation used) User and product documentation on paper media is chlorine-free: If Yes, please specify: Totally chlorine-free Elemental chlorine-free Processed chlorine-free	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		<input type="checkbox"/>		
		<input type="checkbox"/>		
		<input type="checkbox"/>		
P14 Voluntary programs				
P14.1	The product meets the requirements of the following voluntary program(s): ENERGY STAR® Criteria version: 7.1 Date: 4/25/18 Product category: Displays Eco-label: Criteria version: Date: Product category: Eco-label: Criteria version: Date: Product category:			
P15 Additional information (See NOTE B10)				
P9	Energy consumption of specific configuration may vary; description of the tested product configuration: NOTE: Supplier makes no representations, guarantees, assurances or warranties whether express or implied, regarding 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. The information provided here is approximate and provided for informational purposes only. See a Lenovo Account Representative for more information.			
P9	See Energy Star Qualified Monitors & Displays for the latest information: https://www.energystar.gov/products/office_equipment/displays			

NOTE B10 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 B2

Reference	Declaration item
Directive 2011/65/EU (RoHS Directive) * * Specific exemptions apply for certain products and applications.	P1.1
Regulation (EC) 1907/2006(REACH, Annex XVII)	P1.2, P1.4, P1.6, P1.7
Regulation (EC) 2037/2000, 2038/2000, 2039/2000 (Marketing and use of Ozone layer depleting substances)	P1.3, P5.3
Norwegian regulation relating to restrictions on the use of certain dangerous chemicals 20.12.2002	P1.5
Directive 2013/56/EC (Battery and accumulators Directive) * * These provisions shall not apply where, for safety, performance, medical or data integrity reasons, continuity of power supply is necessary and requires a permanent connection between the appliance and the battery or accumulator.	P2.1, P2.2, P2.3, P8.1
Directive 2006/95/EC (Low Voltage Directive)	P3.1
Directive 2004/108/EC (EMC Directive)	P3.1
Directive 1999/5/EC (R&TTE Directive)	P3.1
Regulation (EC) 801/2013 amending Regulation (EC) No 1275/2008 with regard to ecodesign requirements for standby, off mode electric power consumption of electrical and electronic household and office equipment, and amending Regulation (EC) No 642/2009 with regard to ecodesign requirements for televisions	P3.1, P3.2
Regulation (EC) No 1272/2008 (CLP Regulation)	P7.19
Directive 2004/12/EC (Packaging Directive)	P5.1
Decision 97/129/EC (Secondary packaging legislation)	P5.2
Directive 2012/19/EU (WEEE directive)	P6.1