

Standard ECMA-370

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Introduction

In response to interest from public and institutional customers, ICT (Information and Communication Technology) and CE (Consumer Electronics) experts started to develop ECMA TR/70 in 1995, with two revisions in the decade to follow. TR/70 catalogued product parameters related to the environment.

To meet the growing customer demand for standardized, comparable product environmental information, IT Företagen developed the IT Eco Declaration system in 1996, with frequent updates.

To have one widely accepted type II eco declaration, IT Företagen and Ecma International harmonized both declarations into ECMA-370 "THE ECO DECLARATION - TED". TED meets the basic principles of ISO 14021 (environmental labels and declarations / self-declared environmental claims) and eco design standards such as ECMA-341.

It also addresses stakeholder comments on ECMA TR/70 and the IT Eco Declaration and recent regulatory changes.

The objective of this Standard is the use of accurate and verifiable environmental self-declarations that:

- increase potential for market forces to stimulate environmental improvements in products;
- prevent or minimize unwarranted claims;
- reduce marketplace confusion;
- facilitate international trade;
- increase opportunity for purchasers, potential purchasers and users to make more informed choices.

What is new in this version of the Standard?

- To avoid confusion between the attributes that are applicable for certain equipment and those that are not, the Annex B has been divided into two separate templates; Annex B1 for Imaging equipment and Annex B2 for Computers and Computer monitors.
- All sections have been revised to reflect the recent developments regarding legal and market requirements
- For certain complex attributes, new guidance documents have been developed with two purposes, firstly to guide the user of the declaration to understand the attribute, ensure that the correct test methods are used and that correct information is entered in the declaration. The second aim is to ensure that the reader of the declaration understands the information and that it's used correctly when comparing product attributes. Guidance documents are currently available for: acoustic noise, energy efficiency, chemical emissions, chemical substances, but others can be added in the future.

The guidance documents are linked from the declarations to: <u>www.ecma-international.org/publications/standards/Ecma-370.htm</u>.

- NOTE The Guidance documents are not part of the ECMA-370 Standard and can be amended without any prior notification.

This Ecma Standard was developed by Technical Committee 38 and was adopted by the General Assembly of June 2019.



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1 Scope

This Standard specifies environmental attributes and measurement methods for ICT and CE products according to known regulations, standards, guidelines and currently accepted practices. The Standard is also applicable to products used as subassemblies, components, accessories and/or optional parts.

The standard addresses company programs and product related attributes, however not manufacturing processes and logistic aspects. Although the declaration templates as defined in annexes A, B1 and B2 are optimized for application in the European Union, this Standard is intended for global use. Additional annexes may be added for other regions.

The annexes cover the following items:

Company environmental profile

The company environmental profile is split into legal and market requirements such as:

- Product/battery/packaging recycling;
- Environmental policy and environmental management systems;
- Compliance with requirements in voluntary programs.

Product environmental attributes

The Product environmental attributes are split into legal and market requirements on:

- Hazardous substances and preparations;
- Batteries;
- Conformity verification & Eco design of Energy-related Products (ErP);
- Consumable materials;
- Packaging materials;
- Treatment information;
- Environmental conscious design (such as disassembly, recycling, product lifetime, material and substance requirements);
- Energy consumption;
- Emissions (including noise emission, chemical emissions from printing products);
- Maximum sound pressure (for portable audio equipment);
- Ergonomics (for computers and computer monitors);
- Consumable materials for printing products;
- Packaging and documentation;
- Compliance with requirements in voluntary programs.

The attributes are listed without differentiation between products categories. Not all attributes do necessarily apply to each product category.



Based on frequently asked questions from customers, some product attributes such as safety, and ergonomics have been included although they are not considered environmental matters.

2 Conformance

For the European Union, declarations conform to this Standard when all mandatory fields and items that have been declared in the Annex A and B templates of this Standard, can be verified as defined in 6.2. To facilitate understanding, explanatory statements should be added to field C7 of Annex A and field P15 of Annex B.

NOTE Ecma International invites and anticipates the development of declarations for other geographical markets, with their specific legal and market requirements, as additional normative annexes in subsequent editions of this Standard. In those editions, the Conformance clause will refer to the declarations in the normative annexes as regional Options.

3 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

3.1 Ecma International

ECMA-74, Measurement of Airborne Noise Emitted by Information Technology and Telecommunications Equipment (ISO 7779)

ECMA-109, Declared Noise Emission Values of Information Technology and Telecommunications Equipment (ISO 9296)

ECMA-328, Detection and Measurement of Chemical Emissions from Electronic Equipment

ECMA-341, Environmental design considerations for electronic products

ECMA-383, Measuring Energy Consumption, Performance and Capabilities of ICT and CE Products

3.2 ISO/IEC

ISO 1043-4, Plastics -- Symbols and abbreviated terms -- Part 4: Flame retardants

ISO 3741, Acoustics -- Determination of sound power levels and sound energy levels of noise sources using sound pressure -- Precision methods for reverberation test rooms

ISO 3744, Acoustics -- Determination of sound power levels and sound energy levels of noise sources using sound pressure -- Engineering method in an essentially free field over a reflecting plane

ISO 3745, Acoustics -- Determination of sound power levels and sound energy levels of noise sources using sound pressure -- Precision methods for anechoic and hemi-anechoic rooms

ISO 7779, Acoustics -- Measurement of airborne noise emitted by information technology and telecommunications equipment (ECMA-74)

ISO 9296, Acoustics -- Declared noise emission values of information technology and telecommunications equipment (ECMA-109)

NOTE Under revision of ISO 9296:1988, Acoustics -- Declared noise emission values of computer and business equipment.



ISO 11201, Acoustics -- Noise emitted by machinery and equipment -- Determination of emission sound pressure levels at a workstation and at other specified positions in an essentially free field over a reflecting plane with negligible environmental corrections

ISO 11469, Plastics -- Generic identification and marking of plastics products

ISO 11690-1, Acoustics -- Recommended practice for the design of low-noise workplaces containing machinery -- Part 1: Noise control strategies

ISO 14001, Environmental management systems -- Specification with guidance for use

ISO 14021, Environmental labels and declarations -- Self-declared environmental claims (Type II environmental labeling)

ISO/IEC 17025, General requirements for the competence of testing and calibration laboratories

ISO/IEC 28360, Information technology -- Office equipment -- Determination of chemical emission rates from electronic equipment

IEC 61249-2-21, Materials for printed boards and other interconnecting structures

IEC 63000:2016, Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances

3.3 CEN/CENELEC/ETSI

EN 12281:2002, Printing and business paper – Requirements for copy paper for dry toner imaging processes (former DIN 19309)

EN 303 423 V1.1.1 (2017-04), Environmental Engineering (EE) - Electrical and electronic household and office equipment - Measurement of networked standby power consumption for interconnecting equipment; Harmonised Standard covering the measurement method for EC Regulation 1275/2008 amended by EU Regulation 801/2013

prEN 50279 Visual Display Units – Measuring Methods for Low Frequency Electric and Magnetic Near Fields (final draft, 1998)

EN 50332-1:2013, Sound system equipment: Headphones and earphones associated with portable audio equipment - Maximum sound pressure level measurement methodology and limit considerations - Part 1: General method for "one package equipment"

EN 50332-2:2013, Sound system equipment: Headphones and earphones associated with portable audio equipment - Maximum sound pressure level measurement methodology and limit considerations - Part 2: Matching of sets with headphones if either or both are offered separately

EN 50563:2011+A1:2013, External a.c. - d.c. and a.c. - a.c. power supplies – Determination of no-load power and average efficiency of active modes

EN 50564:2011, Electrical and electronic household and office equipment - Measurement of low power consumption

EN 50581:2011, Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances

EN 50643:2018, Electrical and electronic household and office equipment - Measurement of networked standby power consumption of edge equipment

EN 50672:2017, Ecodesign requirements for computers and computer servers



EN 63000:2018, Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances

3.4 International agreements

International agreements (below) are also to be reflected in all regional annexes:

- The Montreal Protocol on Substances that deplete the Ozone Layer
- ICNIRP; International Commission on Non-Ionizing Radiation Protection supported by World Health Organization of the United Nations
- ENERGY STAR ®; Agreement between United States Environmental Protection Agency (US EPA) and the European Union.

3.5 Regional agreements

European Union (EU)

Applicable EU Directives and EU Regulations are reflected in annexes A and B.

3.6 National/federal laws/agreements

Applicable laws/agreements are reflected in respective annexes.

4 Terms and definitions

For the purposes of this document, the following definitions apply.

4.1

self declaration

self-declared environmental claims as defined in ISO 14021

4.2

biobased

a material that is composed, in whole or in significant part, of biological materials or renewable agricultural (including plant, animal, and marine materials) or forestry materials as defined in IEEE Std 1680[™]-2006

4.3

chemical emissions

chemical substances released from a product and measured under predefined testing conditions as defined in ECMA-328

4.4

environment

surroundings in which an organization operates, including air, water, land, natural resources, flora, fauna, humans and their interrelation (ISO 14001)

4.5

energy consumption modes

modes as specified in ECMA-341, ECMA-383, ENERGY STAR $\circledast,$ and other applicable regulations or programs



4.6

hazardous substances and preparations

substances and preparations which are explosive, oxidizing, extremely flammable, highly flammable, flammable, very toxic, toxic, harmful, corrosive, irritant, carcinogenic, mutagenic, toxic to reproduction, sensitizing or dangerous to the environment (as governed by existing national, regional and international legislation)

4.7

noise emissions

airborne sound radiated into the environment from a defined source (machine or equipment) (ISO 11690-1)

4.8

supplier

the party that supplies the product, process or service, which may be a manufacturer, distributor, importer, assembler, service organization, etc.

4.9

upgrading

increasing the capacity of existing features in the product

4.10

noise test code

a standard that is applicable to a particular class, family or type of machinery or equipment which specifies all the information necessary to carry out efficiently the determination, declaration and verification of the noise emission characteristics under standardized conditions

NOTE ECMA-74 together with ECMA-109 comprises the noise test code for Information Technology and Telecommunications Equipment. These Standards are counterparts of ISO 7779 and ISO 9296, respectively.

5 Acronyms

- CAS Chemical Abstracts Service
- CFC chlorofluorocarbons
- CRT cathode ray tube
- EMC electromagnetic compatibility
- HCFC hydrogenated chlorofluorocarbons
- ICNIRP International Commission on Non-Ionizing Radiation Protection
- ICT information and communication technology
- LVD Low Voltage Directive
- PBB polybrominated biphenyl
- PBDE polybrominated diphenyl ether
- PCB polychlorinated biphenyl
- PCT polychlorinated terphenyl
- RED Radio Equipment Directive

SCENIHR Scientific Committee on Emerging and Newly Identified Health Risks

TVOC total volatile organic compounds

WEEE waste electrical and electronic equipment

6 Environmental claims and environmental claims verification

6.1 Environmental claims

Environmental self-declarations according to this Standard are claims regarding environmental aspects of a company, a program, a product, and its packaging.

These claims shall be verifiable using specific predetermined criteria and procedures to assure data reliability.

6.2 Compliance verification

All claims made in the declaration shall be verifiable on request as usual business practice. Examples of documents to be presented in such cases are:

- Attribute specific declaration: signed by a competent person in product assurance or similar position;
- Test report, from either the company or a contracted third-party test laboratory. Such test laboratory should either be accredited, meet ISO/IEC 17025 or follow any other relevant laboratory quality standard or guidelines.

Verification documents, such as listed in Annex C, should be made available within 30 days after the request.

7 Company environmental profile

Annex A is the declaration form for the company environmental profile. The declaration may be published only when all rows and/or fields marked with * (asterisk character in red) are filled-in.

7.1 Legal (L) and Market (M) requirements

7.1.1 Product recycling (C1)

The company participates in a system or has its own system for collection and recycling of end of life products in countries where the company puts them on the market and where required.

7.1.2 Battery recycling (C2)

The company participates in a system or has its own system for collection and recycling of batteries in countries where the company puts products on the market or pays eco tax / fee where required.

7.1.3 Packaging recycling (C3)

The company participates in a system or has its own system for collection and recycling of packaging material in countries where the company puts products on the market and where required.

7.1.4 Environmental policy and environmental management (C4)

The company shall declare the existence of a documented environmental policy approved by the management.

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L

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It shall be declared whether the company operates under an environmental management system. Furthermore, the coverage of the system shall be declared (product development and/or manufacturing).

If the company has an environmental management system it shall be declared, on which base it is certified:

- ISO 14001
- Other (then specify in section C7).

In case the company issues an environmental report available to the public, this should be declared including whether it meets the recommendations of the Global Reporting Initiative (GRI) or any other (then to be specified in C7).

7.1.5 Recycling (C5)

It shall be declared whether information about the product, battery & packaging take back systems (C1, C2 and C3) are available to any stakeholder in printed or electronic format.

7.1.6 Voluntary programs (C6)

It shall be declared whether the company meets the requirements of voluntary program(s) and the relevant product category for which each voluntary program is met.

Criteria version and enforcement date of the declared voluntary agreement(s) may also be declared.

7.1.7 Additional information (C7)

C7 should be used to provide additional information.

In case the fields "other" (C4.2 and C4.3) of the company profile are ticked further information shall be provided in C7.

8 **Product environmental attributes**

Annexes B1 and B2 are the declaration templates for the product environmental attributes. For the convenience of declarers, Annex B1 is provided for imaging equipment and Annex B2 is for computers and computer monitors. The declaration may be published only when all rows and/or fields marked with * (asterisk character in red) are filled-in.

8.1 Legal (L) and Market (M) requirements – Environmental conscious design

Voluntary programs (eco labels or green procurement guidelines) exist for some products. When criteria that are specified in voluntary programs are met, it may be declared referring the applicable version.

8.1.1 Hazardous substances and preparations (P1)

A declaration of the absence / presence (with thresholds specified in the legal references) shall be made for the following hazardous substances and preparations:

- a) Substances and preparations covered by general restrictions, such as:
 - lead, mercury, cadmium, chromium VI, polybrominated biphenyls (PBBs) and polybrominated diphenyl ethers (PBDEs)
 - asbestos
 - ozone depleting substances
 - polychlorinated biphenyl (PCB), polychlorinated terphenyl (PCT)

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М



- short chain chloroparaffins (SCCP) with 10-13 carbon atoms in the chain containing at least 48% per mass of chlorine in the SCCP.
- b) Substances and preparations covered by limitations on the release from parts with direct and prolonged skin contact:
 - nickel
- c) Substances and preparations to be declared according to Article 33 of the EU REACH Directive.

Determination of the material composition should be conducted in accordance with accepted industry practices.

For the applicability of any restrictions for the above listed substances, the appropriate legislation must be consulted.

When substances and/or preparations in products in the scope of this Standard, become banned or restricted, they shall also be reported using the field P15 in the declaration.

8.1.2 Batteries (P2)

L

The following items shall be declared for all batteries or accumulators contained in the product:

- a) If the product contains a battery it should be labeled with the disposal symbol. Chemical symbols apply to batteries which contain more than concentration specified in applicable regulations.
- b) Batteries do not contain mercury, cadmium or lead in concentrations higher than specified in applicable regulations.
- c) If batteries are installed in the product (unless for safety, performance, medical or data integrity reasons, a permanent connection is required between the appliance and the battery or accumulator), they should be readily removable by the end-user or by qualified professionals. When applicable, the product should be accompanied by instructions on how the battery can be removed by either the end-user or qualified professional.
- d) The minimum number of loading cycles that batteries can withstand shall be determined and recorded.

NOTE This requirement applies to the "secondary" batteries providing energy storage for the stand-alone use of the product; it does not apply to batteries (usually primary batteries) providing power to non-volatile memories or real-time clocks.

e) For notebook computers, it shall be determined and reported whether the internal batteries, can be "accessed and replaced by a non-professional user",

When the batteries cannot be "accessed and replaced by a non-professional user", manufacturers shall provide in the technical documentation, on free-access websites and on the external packaging of the notebook computer, the following information "*The battery[ies] in this product cannot be easily replaced by users themselves*". The information provided on the external packaging of the notebook computer shall be clearly visible and legible and it shall be provided in all the official languages of the country where the product is marketed.

NOTE A component is considered "Replaceable by non-professional user" when its replacement operation does NOT require any of the following:

- specialized or custom tools to access, remove, and install the replacement;
- specialized equipment and fixtures to access, remove, and install the replacement;
- special environmental requirements beyond the normal operating environment conditions of the product;



- specialized training to access, remove, and install the replacement;
- ESD protected environment.

"n.a" shall only be ticked if a product does not contain batteries.

8.1.3 Conformity verification & Eco design (P3)

The following items shall be declared for the product:

- a) If the product is CE-marked to show conformance with applicable legal safety requirements.
- b) If the product complies with the Eco design requirements for energy-related products.

"n.a." shall only be ticked if a product does not fall under the scope of the above requirements.

8.1.4 Consumable materials (P4)

The following items shall be declared for all consumables provided with the product:

- a) If a photo conductor (drum, belt etc.) is used in the product, it does not contain cadmium in concentrations higher than specified in applicable regulations.
- b) If ink/toner is used in the product, it does not contain cadmium in concentrations higher than specified in applicable regulations.
- c) If the ink/toner formulation/preparation is classified as hazardous according to applicable requirements, or contains a substance for which there are Community workplace exposure limits, the product/packaging is adequately labeled according to applicable regulations and a Safety Data Sheet (SDS) in accordance with these requirements is available (see legal reference).

"n.a." shall only be ticked if a product does not contain the referenced consumable.

8.1.5 **Product packaging (P5)**

The following items shall be declared for all packaging materials provided with the product:

- a) The concentrations of regulated substances do not exceed specified levels in applicable regulations.
- b) The packaging materials are marked with abbreviations and numbers indicating the nature of the material(s) used.
- c) The product packaging material is free from ozone depleting substances as specified in the Montreal Protocol.

"n.a." shall only be ticked if packaging material doesn't contain plastics.

8.1.6 Treatment information (P6)

It shall be declared whether and Information for recyclers/treatment facilities is available.

"n.a." shall only be ticked if a product does not fall under the any legal requirement.

8.1.7 Disassembly, recycling (P7)

The following items supporting the disassembly, separation and/or recycling by professionals shall be declared for the product:

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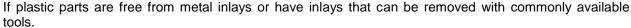
9

L

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e)

f) If all labels are easily separable or made of compatible material. (This does not apply to safety labels)

"n.a." shall only be ticked if a product does not contain the parts listed.

8.1.8 **Product lifetime (P7)**

The following items supporting the extension of lifetime of the products shall be declared:

- a) If an upgrading can be done e.g. with processor, memory, cards or drives.
- b) If an upgrading can be done using commonly available tools.
- c) Spare parts availability in years after the end of production.
- d) Service availability in years after the end of production.

"n.a." shall only be ticked if the product type is typically designed to be replaced rather than to be repaired or serviced.

Further information such as the service warranty/policy offered by the supplier or any restrictions to the spare part and service availability can be listed in the declaration field P15.

8.1.9 Material and substance requirements (P7)

Regarding materials and substances item a) shall be declared and items b) to m) should be declared:

- a) Product cover/housing material types > 25 g (plastic parts shall be specified according to ISO 11469 referring ISO 1043-4).
- b) If the electrical cable insulation materials of external cables are PVC free.
- c) If the electrical cable insulation materials of internal cables are PVC free.
- d) If cover/housing plastic parts > 25 g are low chlorine and bromine.
- e) If printed circuit boards (without components) > 25 g are low halogen, as defined in IEC 61249-2-21.
- f) If chemical specifications of flame retardants in cover / housing plastic parts > 25 g is provided according to ISO 1043-4 (marking).
- g) If chemical specifications of flame retardants in printed circuit boards > 25 g (without components) are TBBPA (reactive), TBBPA (additive), or other. The CAS number of other flame retardants should be specified.
- For plastic parts > 25 g containing flame retardants above 0,1%, the chemical name of the flame retardant, including CAS number, should be specified.

- a) If all parts that have to be treated separately are easily separable.
- b) If all plastic materials in covers/housing have no surface coating.
- c) If all plastic parts > 100 g consist of one material or of easily separable materials.
- d) If all plastic parts > 25 g have material codes according to ISO 11469 referring to ISO 1043-4.

Μ



- i) For plastic parts > 25 g, Risk phrases and Hazard statements are provided for flame retardant substances/preparations above 0,1%.
- j) The weight percentage of recycled material in plastic parts.
- k) The weight percentage of biobased material in plastic parts.
- I) If light sources are free from mercury.
- m) If mercury is used the number of lamps including the maximum mercury content per lamp in mg.
- n) If product includes an integral display, the total mercury content in the integrated display

"n.a." shall only be ticked if a product does not contain the parts listed.

8.1.10 Batteries (P8)

The following items shall be declared for all batteries (including accumulators) contained in the product:

- a) Battery chemical composition.
- "n.a." shall only be ticked if a product does not contain batteries.

8.1.11 Energy consumption (P9)

When reporting the energy consumption for a certain product, the naming of the energy modes, as specified in the applicable standard, shall be used. The pre-designed table for imaging equipment has six rows. Rows that are not used in a certain standard or for a certain product category may be left empty, however with "n.a" ticked in relevant row of right column. Applicable modes shall be declared. The applicable standard shall be specified in the box Reference/Standard for energy modes and test method. For products, for which e.g. industry standards do not exist, the applicable reference shall be given in the box Reference/Standard for energy modes and test method, e.g. "company standard".

For some products duty cycles or workload profiles have been developed to allow an estimation of the typical energy consumption (ETEC, TEC and PTEC). For these, it is voluntary to list the energy consumption per mode.

The following item shall be declared for all energy modes specified in applicable product standards.

The relevant power levels (rms) for applicable voltage(s) in W are to be tested and declared.

The following items should be declared:

- a) Whether or not information about the energy save function is provided with the product;
- b) Compliance to the energy criteria of voluntary programs, such as ENERGY STAR®, if declared, the version, and if applicable, Tier number of the program shall be specified and when applicable, also the product category.

Where applicable, the following shall be declared (including the standard reference):

- ETEC in kWh/year, TEC in kWh/week and PTEC in W;
- the print speed expressed in images per minute for imaging equipment;
- the display resolution expressed in megapixels and the energy efficiency class for computer monitors.

"n.a." shall only be ticked if a product does not have the specified mode (e.g. no load).

Μ



8.1.12 Noise emissions (P10)

For desktop computer, integrated desktop computer, notebook computer, workstation, mobile workstation, desktop thin client, small-scale server, and computer server, the emitted noise level shall be determined and recorded. The A-weighted sound power level shall be determined in accordance with ECMA-74, including installation and operating conditions, and declared according to ECMA-109 (ISO 9296).

Declare the statistical upper limit A-weighted sound power level $L_{WA,c}$ in bels (B) according to ECMA-109 (ISO 9296).

NOTE 1 $L_{WA,c}$ is a statistical maximum value to account for both product variation and lab-to-lab variations, and is typically about 0,3 bels - 0,4 bels greater than the mean A-weighted sound power level, $L_{WA,m}$. ECMA-109 and ISO 9296 specify how to determine and verify $L_{WA,c}$.

If a product is within the scope of ECMA-74 (ISO 7779), measure the idle, operating and other applicable modes according to these standards.

If a product is not within the scope of ECMA-74 (ISO 7779) but within the scope of another applicable test code (see 4.10), measure the operations prescribed by the test code. If no applicable noise test code exists, measure according to the basic standards ISO 3741, ISO 3744 or ISO 3745 and enter operation descriptions in P15 (see 8.1.19).

NOTE 2 Additional noise metrics may be declared in P15 for modes specified in P10.1, provided that the test standards and description of modes are also declared.

Declare only single values and a description of the corresponding operating mode P10.1. A range of values may be reported in P15, following the Guidance document on Acoustic Noise.

If a product does not have a mandatory operating mode, tick "n.a." in P10.

If product sound power level measurement is not feasible, e.g. because of product size, tick "n.a." in P10. In this case, alternative noise metrics may be measured and declared in P15 at the discretion of the manufacturer. In this case, declare the operation(s), noise metric value(s), and the applicable test code. In the absence of a test code, describe the operation, the microphone height and horizontal spacing from the product, and any applicable basic standards.

8.1.13 Maximum sound pressure level for portable audio devices

When applicable, equipment seen as Personal Music Player should follow SCENIHR (Scientific Committee on Emerging and Newly Identified Health Risks) document: Scientific opinion on the Potential health risks of exposure to noise from personal music players and mobile phones including a music playing function, 23 September 2008.

Requirements for protection against excessive sound pressure from personal music players are given in EN 60950-1:2006/A12:2011 and EN 60065:2002/A12:2011. See also EN 62368-1.

8.1.14 Chemical emissions from printing products (P10)

Μ

For all printing products; if chemical emissions have been determined according to ECMA-328 (ISO/IEC 28360), or another standard or measurement procedure as to be specified in the declaration, the typical emission rates during print phase for the following substances should be declared:

- a) Dust (particulate matter);
- b) Styrene;
- c) Benzene;
- d) TVOC.



In addition, for electrophotographic imaging devices, the typical emission rate for ozone should be declared for each of the above listed chemical emissions.

NOTE Typical concentrations of chemical substances that have accumulated as a result of emissions during certain specified test conditions for the printer may be declared in P15.

"n.a." shall only be ticked for non-printing products.

8.1.15 Electromagnetic emissions (P10)

For computer displays it should be declared if the requirements for low frequency electromagnetic fields of a voluntary program(s) are met by the product.

NOTE 1 Public perception and increased requests from customers related to electromagnetic field emissions which emanate from CRT type computer monitors led to the preliminary standard prEN 50279.

NOTE 2 According to the World Health Organization, electromagnetic fields from Visual Display Units, VDUs do not have any negative health effects.

"n.a." shall only be ticked for products out of scope of the above requirement.

8.1.16 Consumable materials for printing products (P11)

For consumable materials for printing products it shall be declared, if:

- a) A Safety Data Sheet (SDS) is available for the ink/toner preparation, even if not legally required (see 8.1.4).
- b) Paper containing post-consumer recycled fibers can be used, provided that it meets the requirements of EN 12281.
- c) 2-sided (duplex) printing/copying is an integrated product function.
- d) The product is delivered to the end-user with default auto-duplex enabled.

"n.a." shall only be ticked for non-printing products.

8.1.17 Ergonomics for computing products (P12)

For computing products, it shall be declared, if:

- a) The monitor/display meets the ergonomic requirements of ISO 9241-307.
- b) The stand-alone external product keyboard meets the requirements of ISO 9995, ISO/IEC TR 24784 and ISO 9241-410.

"n.a." shall only be ticked for products out of scope of the referenced standards.

8.1.18 Packaging and documentation (P13)

The following items shall be declared for all packaging materials provided with the product:

- a) The product packaging material type(s) and weight (kg) for each packaging fraction.
- b) If the product plastic packaging is PVC free.
- c) For product primary corrugated fiberboard packaging, the minimum percentage of post-consumer recovered fiber content:

Μ

Μ

Μ



d) i) Specify media for user and product documentation: Electronic, Paper, Other (tick box)
 ii) If the user and product documentation contain chlorine bleached paper and whether this is totally chlorine-free, elemental chlorine-free or processed chlorine-free.

For d) "n.a." shall only be ticked if the product does not contain any paper based user and product documentation.

Depending on availability of post-consumer recycled fiber, the content may vary between paper mills and over time. It is therefore acceptable to specify a range of recycled content, e.g. 10%-20%.

8.1.19 Voluntary programs (P14)

Μ

M or L

It shall be declared whether the product meets the requirements of voluntary program(s) and the relevant criteria version(s) and effective date(s). See also 7.1.x (C6).

8.1.20 Additional information (P15)

Since the declarations are fixed formats, the field P15 should be freely used to provide additional product related information.



Annex A (Europe) (normative)

Company environmental profile

This Annex is also provided as a separate file – ECMA-370-Annex-A.doc – which shall be used for the declarations.



Company environmental profile - THE ECO DECLARATION

Brand		Logo
Company name *		
Contact information *		
Internet site *		
Issue date *		
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. 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 C7.

Company environmental profile - Legal requirements		Requirement met		
Item		Yes	No	n.a.
C1	Product recycling			
C1.1*	The company participates in a system or has its own system for collection and recycling of end of li products in countries where the company puts them on the market and where required (see legal reference			
C2	Battery recycling			
C2.1*	The company participates in a system or has its own system for collection and recycling of batteries countries where the company puts products on the market (see legal reference) or pays eco tax / fee whe required.			
C3	Packaging recycling			
C3.1*	The company participates in a system or has its own system for collection and recycling of packagir material in countries where the company puts products on the market and where required (see leg reference)			

Company environmental profile - Market requirements Ref		Requirer	equirement r	
Item		Yes	No	n.a.
C4	Environmental policy and environmental management			
C4.1*	The company has a documented environmental policy approved by the management.			
C4.2*	The company has an environmental management system covering: Product development Manufacturing If so, certified according to: ISO 14001			
C4.3	The company regularly publishes an environmental report. If so, it meets the recommendations of The Global Reporting Initiative Dother as specified in C7			
C5	Recycling			
C5.1*	Information about the product, battery & packaging take back system (C1, C2 and C3) is available in printe or electronic format.	ed		



Compa	company environmental profile - Market requirements (continued)			Requirer	Requirement met			
Item					Yes	No	n.a.	
C6	Voluntary programs (Wh	en a voluntary agreement	is mentioned, at le	ast the product category ha	as to be defir	ned)		
C6.1	The company meets the re	equirements of the following	voluntary program(s	3):				
	Voluntary Agreement:	Criteria version:	Date:	Product category:				
	Voluntary Agreement:	Criteria version:	Date:	Product category:				
C7	Additional information							

Legal references Europe Annex A

Reference	Declaration item
Directive 2012/19/EU (WEEE directive)	C1.1
Implementing Regulation (EU) 2019/290 establishing the format for registration and reporting of producers of electrical and electronic equipment to the register.	
Commission Implementing Regulation 2017/699 establishing a common methodology for the calculation of the weight of electrical and electronic equipment (EEE) placed on the national market in each Member State and a common methodology for the calculation of the quantity of waste electrical and electronic equipment (WEEE) generated by weight in each Member State.	
Directive 2006/66/EC (Battery and accumulators Directive), as amended.* * 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.	C2.1
Directive 2004/12/EC (Packaging Directive)	C3.1
Decision 97/129/EC (Secondary packaging legislation)	C3.1



Annex B1 (Europe) (normative)

Product environmental attributes - Imaging equipment

This Annex is also provided as a separate file – <u>ECMA-370-Annex-B1.doc</u> – which shall be used for the declarations.



Annex B1 Product environmental attributes Imaging equipment

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 *	Logo
Company name *	
Contact information *	
e-mail address	
Internet site *	
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 *					
Commercial name *					
Model number *					
Issue date *					
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.

About Annex B1 Annex B1 reflects Product environmental attributes relevant for Imaging products. The following items from the ECMA-370 Main body are not shown in the template: P9.1 PTEC, ETEC and display resolution P12.1-P12.2 Ergonomic requirements.

ec	ma
	INTERNATIONAL

Model number *	Logo	
incuci number	Logo	
Issue date *		
issue uale		

			Requirement me		
Item		Yes	No	n.a.	
P1	Hazardous substances and preparations				
P1.1*	Products do comply with the current European RoHS Directive. (See legal reference and NOTE B1 ¹)				
P1.2*	Products do not contain Asbestos (see legal reference).				
	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				
D ((*	concentration values.				
P1.4*	Products do not contain more than; 0,005% polychlorinated biphenyl (PCB), 0,005% polychlorinated				
P1.5*	terphenyl (PCT) in preparations (see legal reference). Products do not contain more than 0,1% short chain chloroparaffins (SCCP) with 10-13 carbon atoms in th				
F 1.5	chain containing at least 48% per mass of chlorine in the SCCP (see legal reference).	- -			
P1.6*	Parts with direct and prolonged skin contact do not release nickel in concentrations above 0,5 μg/cm ² /weel				
1 1.0	(see legal reference).	•			
	Comment: Max limit in legal reference when tested according to EN1811:2011-5.				
P1.7*	REACH Article 33 information about substances in articles is available at (add URL or mail contact):				
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)				
P2.2*	Batteries or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadmium. (See lega	i 🔲			
	reference)				
P2.3*	Batteries and accumulators are readily removable. (See legal reference)				
P2.4*	Documentation includes the number of cycles the (secondary) battery can withstand. (See legal reference)				
P2.5*	When internal batteries of a notebook computer cannot be "accessed and replaced by a nonprofessional	— <u> </u>	—Ħ		
-	user", the related text is present and legible on the external packaging (see legal reference)				
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):				
P3.2*	The product complies with the Eco design Requirements for Energy-Related Products,				
	(see legal reference).	_	_	_	
	Required information is; 📃 given in item P15 or added to this document,				
	available at (add URL):				
P4	Consumable materials				
P4.1*	If a photo conductor (drum, belt etc.) is used in the product, it does not contain cadmium at a level greater				
-	than 0,01% (see legal reference and NOTE B1).				
P4.2*	If ink/toner is used in the product, it does not contain cadmium at a level greater than 0,1% by weight (see				
D4 0*	legal reference)				
P4.3*	If the ink/toner formulation/preparation is classified as hazardous or contains a substance for which there are Community workplace exposure limits, the product/packaging is adequately labeled according to				
	applicable regulations 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				
	hexavalent chromium by weight of these together.				
P5.2*	The packaging materials are marked with abbreviations and numbers indicating the nature of the material	\$)			
	used (see legal reference).				
P5.3*	The product packaging material is free from ozone depleting substances as specified in the Montreal				
	Protocol (see legal reference).				
DC	Comment: Legal reference has no maximum concentration values.				
P6.1*	Treatment information Information for recyclers/treatment facilities is available (see legal reference).				
F0.1	mormanon for recyclers/treatment facilities is available (see legal felefelice).				

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 *	Logo	
Issue date *		

	Environmental conscious design *=mandatory to fill in. Additional information regarding each item may be found under P14.	Ye			nt met n.a.
Item P7	Emandatory to him in. Additional information regarding each item may be found under P14.	re	95	INO	n.a.
	Disassembly, recycling				
P7.1*	Parts that have to be treated separately are easily separable		Г		
P7.2*	Plastic materials in covers/housing have no surface coating.		Ī		Ē
P7.3*	Plastic parts > 100 g consist of one material or of easily separable materials.	Π	Ī	1	Ē
P7.4*	Plastic parts > 25 g have material codes according to ISO 11469 referring ISO 1043-4.	Π	Ē		Ē
P7.5	Plastic parts are free from metal inlays or have inlays that can be removed with commonly available tools.	Π	ī		Ē
P7.6*	Labels are easily separable. (This requirement does not apply to safety/regulatory labels).	Ē	Ē	-	Ē
	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: years				
P7.10	Service is available after end of production for: years				
	Material and substance requirements				
P7.11*	Product cover/housing material type (e.g. plastics, metal, aluminum): Material type: Material type: Material type:				
P7.12	Insulation materials of external electrical cables are PVC free.				
P7.13	Insulation materials of internal electrical cables are PVC free.				
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.				
P7.15	Printed circuit boards, PCBs (without components) are low halogen: all PCBs > 25 g are low halogen as defined in IEC 61249-2-21. (See NOTE B2)				
P7.16	Flame retarded plastic parts > 25 g in covers / housings are marked according ISO 1043-4: Marking:				
P7.17	Alt. 1: Chemical specifications of flame retardants in printed circuit boards > 25 g (without components): TBBPA (additive), TBBPA (reactive) (See NOTE B3), Other; chemical name: , CAS #:		C		
	<u>Alt. 2:</u> Chemical specifications of flame retardants in printed circuit boards (without components) > 25 g according ISO 1043-4:				
P7.18	Alt. 1: Flame retarded plastic parts > 25 g contain the following flame retardant substances/preparations in concentrations above 0,1%: 1. Chemical name: , CAS #: 2. Chemical name: , CAS #: 3. Chemical name: , CAS #:				
	Alt. 2: Chemical specifications of flame retardants in plastic parts > 25 g according ISO 1043-4:				
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)		Ľ		

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-internationl.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.



Model number *

Issue date	*								
Product	environm	ental atti	ributes - Market ree	quirements (contin	ued)			rement	met
Item							Ye	s No	n.a.
D7 00*			ance requirements (c		,			,	_
P7.20*	Postconsu	imer recyc	cled plastic material co	ntent is used in the pro	duct (See NOTE B6):		L		
	 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 %. or b) The weight of recycled material is g. 								
P7.21*	,	-		g. n the product (See NO	TE B7)·				
	If YES; at a) Of to total or	least one tal plastic plastic by	of the two alternatives parts' weight > 25 g, t	below shall be answer he biobased plastic ma	ed;	ted as a perce	ntage of		
P7.22*			e from mercury, i.e. le becify: Number of lam	ess than 0,1 mg/lamp.	m mercury content per	lamp: n	ng		
P7.23*			, ,	total mercury content in					
P8	Batteries								
P8.1*	Battery ch	emical cor	nposition:						
P9		-	on (See NOTE B8)						
P9.1	For the pr	oduct the f	following power levels	or energy consumptior	ns are reported:				
Energy mo	ode *		Power level at 100 V AC	Power level at 115 V AC	Power level at 230 V AC	Reference/Sta modes and te		energy	
Sleep mod STAR® Op (OM) prode	le for ENER perational M ucts	GY lode	W	W	W				
Standby/of ENERGY S Mode (OM	STAR Oper	ational	W	W	W				
TEC produ	for ENERG Icts (TEC= Insumption)	Typical	kWh/week	kWh/week	kWh/week				
			W	W	W				
			W	W	W				
			W	W	W				
			W	W	W				
			W	W	W				
		W	W	W					
External Power Supply Efficiency Level (International Efficiency Marking Protocol) *:									
Print/Scan Speed * : images per minute									
	Default time to enter energy save mode: minutes								
P9.2*	Informatio	n about th	e energy save function	n is provided with the p	roduct.				

Logo

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.

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.



Model number *	Logo	
Issue date *		

Produc	oduct environmental attributes - Market requirements (continued)				Require	ment	met		
Item							Yes	No	n.a.
P10	Emissions								
	Noise emission	 Declared according to) ISO 9296 (S	/					
P10.1	Mode	Mode description		Statistical up L _{WA,c} (B)	pper limit A-weigł	nted sound powe	er level,		
	Idle	*		*					
	Operation	*		*					
	Other mode								
	Measured accore	ding to: ISO 7779 C	ECMA-74 (only if not c	overed by ECMA-7	4)				
	Chemical emiss	sions from printing pro	ducts (See N	IOTE B10)					
P10.2*		according to ECMA-328		n of Chemical Emis	sion Rates from I	Electronic			
		/IEC 28360) 📃, other s							
P10.3	Typical emission	rate (operation phase)	s (mg/h):						
			_	_	_				_
		ohic devices: Ozone	Dust	Styrene	Benzene	TVOC			
	Ink devices:		Dust	Styrene	Benzene	TVOC			
	NOTE: complian	ce with maximum emiss	ion rates in e	co labels to be decl	ared in P14.				
P11		aterials for printing pro							
P11.1*	A Safety Data SI	heet (SDS) is available f	or the ink/tone	er preparation, ever	n if not legally req	uired (see P4.3)			
P11.2*	Paper containing EN 12281.	g post-consumer recycle	d fibers can b	e used, provided th	at it meets the re	quirements of			
P11.3*	2-sided (duplex)	printing/copying is an in	tegrated prod	uct function.					
P11.4*	The product is de	elivered to end-user with	default auto-	duplex enabled.					\square
P13	Packaging and	documentation							
P13.1*	Product packagin Product packagin	ng material type(s): ng material type(s): ng material type(s):	weight (l weight (l weight (l	kg):					
P13.2*	Product plastic p	primary packaging is free	from PVC.						
P13.3*	consumer recover	ary corrugated fiberboar ered fiber content:	%		ed percentage of	minimum post-			
P13.4*		or user and product docu Paper, Other	mentation (tic	k box):					
P13.5		nplete this item if paper of t documentation on pap becify:							
	Totally chlorine-f	free							
	Elemental chlori						H		
	Processed chlori	ine-free					H		
P14	Voluntary prog	rams:							
P14.1		ets the requirements of t	he following v	oluntary program(s):				
	ENERGY STAR	® Criteria ve	rsion:	Date:	Product	category:			
	Eco-label:	Criteria ve		Date:	Product	category:			
	Eco-label:	Criteria ve	rsion:	Date:	Product	category:			

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

NOTE B10 A Guidance document on Chemical Emissions is available; see http://www.ecma-international.org/publications/standards/Ecma-370.htm.



Model number *	Logo	
Issue date *		

Product environmental attributes - Market requirements (concluded)P15Additional information (See NOTE B11)

Requirement met

NOTE B11 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 B1

Reference	Declaration item
Directive 2011/65/EU (RoHS Directive) * * Specific exemptions apply for certain products and applications.	P1.1, P4.1, P3.1
Commission Regulation (EC) 1907/2006 (REACH Regulation), annex XVII	P1.2, P1.4, P1.6, P1.7, P4.2
Commission Regulation (EC) 1907/2006 (REACH Regulation), annex VII	P1.10
Commission Regulation (EC) 1907/2006 (REACH Regulation), Article 31, annex II)	P4.3
Commission Regulation (EC) No. 2037/2000, 2038/2000, 2039/2000, (Marketing and use of Ozone layer depleting substances)	P1.3, 5.3
Norwegian regulation relating to restrictions on the use of certain dangerous chemicals 20.12.2002	P1.5
Directive 2006/66/EC (Battery and accumulators Directive), as amended.* * 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 2014/35/EU (Low Voltage Directive)	P3.1
Directive 2014/30/EU (EMC Directive)	P3.1
Directive 2014/53/EU (RE Directive)	P3.1
Commission Regulation (EC) No 1275/2008 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for standby and off mode electric power consumption of electrical and electronic household and office equipment (Standby Regulation)	P3.1, P3.2
Commission 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	
Commission Regulation (EU) No 617/2013 of 26 June 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for computers and computer servers	
Commission Regulation (EC) 1272/2008 (CLP Regulation)	P4.3, 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
Implementing Regulation (EU) 2019/290 establishing the format for registration and reporting of producers of electrical and electronic equipment to the register.	
Commission Implementing Regulation 2017/699 establishing a common methodology for the calculation of the weight of electrical and electronic equipment (EEE) placed on the national market in each Member State and a common methodology for the calculation of the quantity of waste electrical and electronic equipment (WEEE) generated by weight in each Member State.	



Annex B2 (Europe) (normative)

Product environmental attributes - Computers and computer monitors

This Annex is also provided as a separate file – ECMA-370-Annex-B2.doc – that shall be used for the declarations.



Annex B2 - Product environmental attributes Computers and 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 *	Logo
Company name *	
Contact information *	
e-mail address	
Internet site *	
Additional information	

The company declares (based on product specification or test results based obtained from sample testing), that the product						
conforms to the statement	conforms to the statements given in this declaration.					
Type of product *						
Commercial name *						
Model number *						
Issue date *						
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.

About Annex B2

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:

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

ec	ma
	INTERNATIONAL

Model number *	Logo	
Issue date *		

Product	environmental attributes - Legal requirements	Require	ment	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)			
P1.2*	Products do not contain Asbestos (see legal reference).			
	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 concentration values.			
P1.4*	Products do not contain more than; 0,005% polychlorinated biphenyl (PCB), 0,005% polychlorinated			
	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 t	ne		
D / at	chain containing at least 48% per mass of chlorine in the SCCP (see legal reference).			
P1.6*	Parts with direct and prolonged skin contact do not release nickel in concentrations above 0,5 μg/cm ² /wee (see legal reference).	ek 🔄		
	Comment: Max limit in legal reference when tested according to EN1811:2011-5.			
P1.7*	REACH Article 33 information about substances in articles is available at (add URL or mail contact):			
1 1.7				
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)			
P2.2*	Batteries or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadmium. (See leg reference)	al		
P2.3*	Batteries and accumulators are readily removable. (See legal reference)			
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):			
P3.2*	The product complies with the Eco design requirements for energy-related products,			
	(see legal reference).	_	_	_
	Required information is; given in item P15 or added to this document,			
	available at (add URL):			
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.			
P5.2*	The packaging materials are marked with abbreviations and numbers indicating the nature of the material	(s)		
	used (see legal reference).			
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.			
P6	Treatment information			
P6.1*	Information for recyclers/treatment facilities is available (see legal reference).			

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 nu	mber *		Logo			
Issue da	e *					
Product	environmenta	I attributes - Market requirements (See General NOTE GN below))			
		tal conscious design	/	Require	ment	met
Item	*=mandatory to f	ill in. Additional information regarding each item may be found under P14.		Yes	No	n.a.
P7	Design					
	Disassembly, r					
P7.1*		to be treated separately are easily separable				
P7.2*	Plastic materials	in covers/housing have no surface coating.				
P7.3*	Plastic parts > 1	00 g consist of one material or of easily separable materials.				
P7.4*	Plastic parts > 2	5 g have material codes according to ISO 11469 referring ISO 1043-4.				
P7.5	Plastic parts are	free from metal inlays or have inlays that can be removed with commonly av	vailable tools.			
P7.6*	Labels are easily	y separable. (This requirement does not apply to safety/regulatory labels).				
	Product lifetime	e				
P7.7*	Upgrading can b	be done e.g. with processor, memory, cards or drives				
P7.8*	Upgrading can b	be done using commonly available tools				
P7.9.	Spare parts are	available after end of production for: years				
P7.10	Service is availa	ble after end of production for: years				
	Material and su	bstance requirements				
P7.11*	Product cover/h	ousing material type (e.g. plastics, metal, aluminum):				
	Material type:	Material type: Material	type:			
P7.12	Insulation mater	ials of external electrical cables are PVC free.				
P7.13	Insulation mater	ials of internal electrical cables are PVC free.				

P7.13	Insulation materials of internal electrical cables are PVC free.		
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.]
P7.15	Printed circuit boards, PCBs (without components) are low halogen: all 🗌 PCBs > 25 g 🗌 are low halogen as defined in IEC 61249-2-21. (See ² NOTE B2)]
P7.16	Flame retarded plastic parts > 25 g in covers / housings are marked according ISO 1043-4: Marking:]
P7.17	<u>Alt. 1:</u> Chemical specifications of flame retardants in printed circuit boards > 25 g (without components): TBBPA (additive) , TBBPA (reactive) (See NOTE B3), Other; chemical name: , CAS #: <u>Alt. 2:</u> Chemical specifications of flame retardants in printed circuit boards (without components) > 25 g]
P7.18	according ISO 1043-4: Alt. 1: Flame retarded plastic parts > 25 g contain the following flame retardant substances/preparations in concentrations above 0,1%: 1. Chemical name: , CAS #: 2. Chemical name: , CAS #: 3. Chemical name: , CAS #:]
P7.19	<u>Alt. 2: Chemical specifications of flame retardants in plastic parts > 25 g according ISO 1043-4:</u> 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)		

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.



Model number *						Logo				
Issue date	e *									
Product	environn	nental att	ributes - Market re	quirements (conti	nued)		Requi	reme	nt met	
Item							Yes	No	n.a.	
	Material	and subst	tance requirements (continued)						
P7.20*	Postcons	sumer recy	cled plastic material co	ontent is used in the p	roduct (See NOTE B6):				
	a) Of to perc	S; at least one of the two alternatives below shall be answered; Of total plastic parts' weight > 25 g, the postconsumer recycled plastic material content (calculated as a percentage of total plastic by weight) is %.								
	or b) The	weight of	recycled material is	g.						
P7.21*				in the product (See N	OTE B7):					
	a) Of t of to or	of total plastic by weight) is %.								
P7.22*				ess than 0,1 mg/lamp.						
		/	pecify: Number of lam	nps: and maxim	um mercury content p	er lamp:	mg			
P8	Batteries	-								
P8.1*			mposition:							
P9 P9.1			ion (See NOTE B8)	s or energy consumption	ana ara ranartadi					
					1					
Energy mo	ode *		Power level at 100 V AC	Power level at 115 V AC	Power level at 230 V AC	Reference/Sta modes and tes	Indard for energest method *	ЭУ		
charger pl	oower supp ugged in th disconnect	ne wall								
PTEC * Typical En	ergy Cons	umption	W	W	W					
ETEC * Annual En	ergy Cons	umption	kWh/year	kWh/year	kWh/year					
External P	External Power Supply Efficiency Level (International Efficiency Marking Protocol) * :									
Display res	Display resolution * : megapixels									
Default tim	ne to enter	energy sav	ve mode: minut	tes						
P9.2*	Informati	on about th	ne energy save function	on is provided with the	product.					
P9.3	P9.3 Energy efficiency class (monitors only):									

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.

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.



Model number *	Logo	
Issue date *		

Produc	t environmenta	attributes - Market requiremen	nts (continu	ed)	Require	ment	t met
Item		•	•	•	Yes	No	n.a.
P10	Emissions						
	Noise emissio	n – Declared according to ISO 9296 (
P10.1	Mode	Mode description		Statistical upper limit A-weighted sc L _{WA,c} (B)	und power level,		
	Idle	*		*		[
	Operation	*		*			
	Other mode					· · · ·	
	Measured acco	• <u> </u>	t covered by E	ECMA-74)			
	Electromagnet						
P10.4	program(s):	ay meets the requirement for low freq	luency electro	magnetic fields of the following volu	ntary		
P12	Ergonomics for	or computing products					
P12.1*		ets the ergonomic requirements of IS					
P12.2*	The physical in	put device meets the requirements of	ISO 9995 and	d ISO 9241-410.			
P13		documentation					
P13.1*	Product package Product package	ying material type(s): weight ying material type(s): weight ying material type(s): weight	(kg):				
P13.2*		primary packaging is free from PVC.					
P13.3*	consumer reco	nary corrugated fiberboard packaging vered fiber content: %		contained percentage of minimum p	ost-		
P13.4*		or user and product documentation (t , Paper, Other	tick box):				
P13.5		mplete this item if paper documentation on paper media is of pecify:					
	Totally chlorine	-free					
	Elemental chlor						
	Processed chlo						
P14	Voluntary prog	arams					
P14.1		eets the requirements of the following	voluntary prog	gram(s):			
	ENERGY STAF Eco-label: Eco-label:	R® Criteria version: Criteria version: Criteria version:	Date Date Date	e: Product category:			
P15	Additional info	ormation (See NOTE B10)					
P9		mption of computer products; desc	cription of the	e tested product configuration:			
		· · ·		_			

NOTE B9 A Guidance document on Acoustic Noise is available;

see http://www.ecma-international.org/publications/standards/Ecma-370.htm.

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, P3.1
Regulation (EC) 1907/2006 (REACH Regulation), 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 2006/66/EC (Battery and accumulators Directive), as amended.* * 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 2014/35/EU (Low Voltage Directive)	P3.1
Directive 2014/30/EU (EMC Directive)	P3.1
Directive 2014/53/EU (RE 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
COMMISSION REGULATION (EU) No 617/2013 of 26 June 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for computers and computer servers	P2.4, P2.5
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
Implementing Regulation (EU) 2019/290 establishing the format for registration and reporting of producers of electrical and electronic equipment to the register.	
Commission Implementing Regulation 2017/699 establishing a common methodology for the calculation of the weight of electrical and electronic equipment (EEE) placed on the national market in each Member State and a common methodology for the calculation of the quantity of waste electrical and electronic equipment (WEEE) generated by weight in each Member State.	



Annex C (informative)

Verification documentation

The tables below list the verification documents that should be made available (either electronically, e.g. available on a public web-site, or in a printed form) in accordance with item <u>6.2</u> of this Standard.

For annex A

Company	Company environmental profile - Legal requirements				
Item	Verification documentation				
C1	Product recycling				
C1.1	Contract with third-party or signed letter with company system description				
C2	Battery recycling				
C2.1	Contract with third-party or signed letter with company system description				
C3	Packaging recycling				
C3.1	Contract with third-party or signed letter with company system description				
Company	r environmental profile - Market requirements				
Item	Verification documentation				
C4	Environmental policy and environmental management				
C4.1	Document signed by management				
010					

C4.1	Document signed by management
C4.2	Third-party party certificate or document signed by management
C4.3	Environmental report
C5	Recycling
C5.1	Documents proving this claim and documents provided with the product in printed or electronic format
C6	Voluntary programs
C6.1	Document that proves the claim, reference to web page
C7	Additional information
	Document that proves the claim, reference to web page



For annexes B1 and B2

Product	environmental attributes - Legal requirements
Item	Verification documentation
P1	Hazardous substances in the product
P1.1-	Letter signed by a competent person, product assurance or similar position
P1.7	Letter signed by a competent person, product assurance of similar position
P2	Batteries
P2.1-	Letter signed by a competent person, product assurance or similar position
P2.3	
P3	Electrical safety, EMC and connection to the telephone network
P3.1-	Declaration of Conformity (DoC)
P3.2	
P4	Consumable materials
P4.1-	Letter signed by a competent person, product assurance or similar position and Material Safety Data Sheet (MSDS), if
P4.3	applicable
P5	Packaging materials
P5.1-	Letter signed by a competent person, product assurance or similar position
P5.3	
P6	Treatment information
P6.1	Letter signed by a competent person, product assurance or similar position
	environmental attributes - Market requirements
Item	Verification documentation
P7	Environmental conscious design
P7.1-	Letter signed by a competent person, product assurance or similar position
P7.22	Definition
P8	Batteries
P8.1	Letter signed by a competent person, product assurance or similar position
-	Energy consumption
P9.1 P9.2	Test report signed by a competent person, product assurance or similar position Documents provided with the product such as the user manual
P9.2 P9.3	Letter signed by a competent person, product assurance or similar position
P10	Emissions
P10.1	Test report from either:
1 10.1	an accredited test laboratory
	 a laboratory meeting ISO/IEC 17025
	 a laboratory following any other laboratory quality standard or guidelines
P10.2	Letter signed by a competent person, product assurance or similar position or reference to official website of the program
	proving the claim
P10.3	Test report according to ECMA-328 or other standard
P10.4	Test report either from an accredited test laboratory or a laboratory meeting ISO/IEC 17025
P11	Consumable materials for printing products
P11.1	Safety Data Sheet (SDS)
P11.2-	Letter signed by a competent person, product assurance or similar position
P11.4	
P12	Ergonomics for computing products
P12.1	Test report either from an accredited test laboratory or a laboratory meeting ISO/IEC 17025
P12.2	Letter signed by a competent person, product assurance or similar position
P13	Packaging and documentation
P13.1-	Letter signed by a competent person, product assurance or similar position
P13.5	
P14	Voluntary programs
P14.1	Document that proves the claim, reference to web page
D15	Additional information

 P15
 Additional information

 Document that proves the claim, reference to web page



=