

Department for Environment Food and Rural Affairs
Laser Multi-Functional Devices (MFDs) standards



Date	Version	Change
May 2008	1.0	Introduction of specifications for MFDs.
May 2009	2.0	Complete revision, including the introduction of Class leader specifications and Award Criteria.

IMPACT AREA	MANDATORY
Energy performance requirements	The product meets the performance requirements of ENERGY STAR or equivalent
Promoting more efficient practice: energy save function	Information about the energy save function is provided with the product.
Parts: facilitating segregation and recovery	Plastic materials in covers/housing have no surface coatings that are incompatible with recycling or reuse, including metal coatings.
Parts: facilitating segregation and recovery	Plastic parts >25 g have material codes according to ISO 11469 referring to ISO 1043.
Parts: facilitating segregation and recovery	Plastic parts are free from metal inlays or have inlays that can be removed with commonly available tools.
Parts: facilitating segregation and recovery	Labels are easily separable (This requirement does not apply to safety/regulatory labels).
Parts: facilitating segregation and recovery	Product does not contain batteries defined as hazardous according to 91/157/EEC
Sound level	During printing operation the 'Declared A-weighted Sound Level' (LWAd) according to ISO 9296, measured in accordance with ISO 7779, shall not exceed the limits set by the following formula: • LWAd: $0.035 \times \text{ipm} + 5.9$ (B) Where ipm = images per minute. The devices shall additionally not exceed 7.5 (B) LWAd except for devices with an ipm >71
Material safety	A Material Safety Data Sheet (MSDS) is available for the ink/toner preparation, even if not legally required.
Paper	Paper containing recycled fibres that meets the requirements of EN12281 can be used.
Paper	User and product documentation do not contain chlorine bleached paper

Imaging speed	Products with an imaging speed of ≥ 45 ipm shall include automatic duplexing as a standard feature at the time of purchase. Automatic duplexing must be offered as a standard feature or optional accessory at the time of purchase for products with an imaging speed of 25 – 44 ipm.
Packaging	Product plastic packaging does not contain chlorine
Suppliers	Suppliers must provide a free take back system for imaging product consumables
Prolonging useful life	Upgrading of components can be done (eg with processor, memory, cards or drives)
Prolonging of useful life	Upgrading can be done using commonly available tools.
Prolonging of useful life	Spare parts are available after end of production for 5 years
Chemical emission requirements	Product does not contain batteries defined as hazardous according to 91/157/EEC
Chemical emission requirements	The product meets the chemical emission requirements of Blue Angel, Nordic Swan or TCO

IMPACT AREA	BEST PRACTICE
Parts: facilitating segregation and recovery	Same as the mandatory standard and plastic parts >25 g are free from flame retardant substances/preparations above 0.1% classified as R45/46, R50/51/53 and R60/61 (67/548/EEC).
Energy performance requirements	Same as the mandatory standard.
Promoting more efficient practice: energy save function	Same as the mandatory standard.
Prolonging useful life: Hardware upgrades	Same as the mandatory standard.
Sound level	Same as the mandatory standard.
Chemical Emission requirements	Same as the mandatory standard.
Material safety	Same as the mandatory standard.
Paper	Same as the mandatory standard.
Imaging speed	Same as the mandatory standard.
Packaging	Same as the mandatory standard.
Documentation	Same as the mandatory standard.

Suppliers	Same as the mandatory standard.
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IMPACT AREA	CLASS LEADER
Parts: facilitating segregation and recovery	Same as the best practice standard and parts that have to be treated separately are easily separable.
Energy performance requirements	Same as the mandatory standard.
Promoting more efficient practice: energy save function	Same as the mandatory standard.
Prolonging useful life: hardware upgrades	Same as the mandatory standard.
Sound level	Same as the mandatory standard.
Chemical emission requirements	Same as the mandatory standard.
Material safety	Same as the mandatory standard.
Paper	Same as the mandatory standard.
Imaging speed	Same as the mandatory standard.
Packaging	Same as the mandatory standard.
Documentation	Same as the mandatory standard.
Suppliers	Same as the mandatory standard.

Products awarded the ENERGY STAR label will be deemed to comply with Energy Star criteria. Appropriate means of proof for all Laser MFDs standards include a technical dossier of the manufacturer or a test report from a recognised body demonstrating that the criteria are met.

See also

- [EU ENERGY STAR](#)
Under EU law the use of Energy Star criteria is mandatory for electronic products purchased by central government.

Laser multi functional devices (MFDS) award criteria

IMPACT AREA	MINIMUM AWARD CRITERIA
Parts: facilitating segregation and recovery	Parts that have to be treated separately are easily separable

Prolonging useful life: hardware upgrades	Servicing of products is available after end of production for 5 years
Chemicals in components	Electrical cable insulation material of power cables are halogen free (including PVC)
Chemicals in components	Electrical cable insulation material of signal cables are halogen free (including PVC)
Chemicals in components	All cover/housing plastic parts >25 g are halogen free
Chemicals in components	All printed circuit boards (without components) >25 g are halogen free
Chemicals in components	Plastic parts >25 g are free from flame retardant substances/preparations above 0.1% classified as R45/46, R50/51/53 and R60/61 (67/548/EEC)
Light sources	Light sources are free from mercury.
Documentation	User and product documentation contain recycled paper

IMPACT AREA	BEST PRACTICE AWARD CRITERIA
Parts: facilitating segregation and recovery	Same as the minimum award criteria
Prolonging useful life: hardware upgrades	Same as the minimum award criteria
Chemicals in components	Same as the minimum award criteria
Light sources	Same as the minimum award criteria
Documentation	Same as the minimum award criteria
Parts facilitating design and recovery	Same as the minimum award criteria
Prolonging useful life: hardware upgrades	Same as the minimum award criteria
Chemicals in components	Same as the minimum award criteria
Parts	Same as the minimum award criteria
Light sources	Same as the minimum award criteria
Documentation	Same as the minimum award criteria

Appropriate means of proof for all Laser MFDs award criteria include a technical dossier of the manufacturer or a test report from a recognised body demonstrating that the criteria are met.