

Department for Environment Food and Rural Affairs
Inkjet 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 energy performance requirements of ENERGY STAR
Promoting more efficient practice: energy save function	Information about the energy save function is provided with the product
Parts: facilitating segregation and recovery	Parts that have to be treated separately are easily separable
Parts: facilitating segregation and recovery	Plastic parts >100 g consist of one material or of easily separable materials
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)
Chemicals in components	All cover/housing plastic parts >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)
Chemicals in components	Light sources are free from mercury

Operational noise emissions	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
Chemicals in components	A Material Safety Data Sheet (MSDS) is available for the ink/toner preparation, even if not legally required.
Enabling use of recycled paper	Paper containing recycled fibres that meets the requirements of EN12281 can be used.
Promoting more efficient practice: automatic duplexing	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
Documentation	User and product documentation do not contain chlorine bleached paper
Suppliers: facilitating segregation and recovery	Suppliers must provide a free take back system for imaging product consumables (except paper)

IMPACT AREA	BEST PRACTICE
Energy performance requirements	Same as the mandatory standard
Promoting more efficient practice: energy save function	Same as the mandatory standard
Parts: facilitating segregation and recovery	Same as the mandatory standard
Parts: facilitating segregation and recovery	Same as the mandatory standard
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Parts: facilitating segregation and recovery	Same as the mandatory standard
Chemicals in components	Same as the mandatory standard
Chemicals in components	Same as the mandatory standard

Chemicals in components	Same as the mandatory standard
Operational noise emissions	Same as the mandatory standard
Chemicals in components	Same as the mandatory standard
Enabling use of recycled paper	Same as the mandatory standard
Promoting more efficient practice: automatic duplexing	Same as the mandatory standard
Packaging	Same as the mandatory standard
Documentation	Same as the mandatory standard
Suppliers: facilitating segregation and recovery	Same as the mandatory standard

IMPACT AREA	CLASS LEADER
Energy performance requirements	Same as the mandatory standard
Promoting more efficient practice: energy save function	Same as the mandatory standard
Parts: facilitating segregation and recovery	Same as the mandatory standard
Parts: facilitating segregation and recovery	Same as the mandatory standard
Parts: facilitating segregation and recovery	Same as the mandatory standard
Parts: facilitating segregation and recovery	Same as the mandatory standard
Parts: facilitating segregation and recovery	Same as the mandatory standard
Chemicals in components	Same as the mandatory standard
Chemicals in components	Same as the mandatory standard
Chemicals in components	Same as the mandatory standard
Operational noise emissions	Same as the mandatory standard
Chemicals in components	Same as the mandatory standard
Enabling use of recycled paper	Same as the mandatory standard

Promoting more efficient practice: automatic duplexing	Same as the mandatory standard
Packaging	Same as the mandatory standard
Documentation	Same as the mandatory standard
Suppliers: facilitating segregation and recovery	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 Inkjet 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-US ENERGY STAR](#)
See the European Commission’s announcement that Energy Star criteria be used in central government procurement

Inkjet multi functional devices (MFDS) award criteria

IMPACT AREA	MANDATORY
Parts: facilitating segregation and recovery	Plastic materials in covers/housing have surface coatings that are compatible with recycling or reuse, including metal coatings.
Parts: facilitating segregation and recovery	Spare parts are 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 printed circuit boards (without components) >25 g are halogen free
Batteries	Batteries meet the requirements of the EU Flower Eco-Label
Chemical Emissions	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
Parts: facilitating segregation and recovery	Same as the mandatory standard
Chemicals in components	Same as the mandatory standard
Chemicals in components	Same as the mandatory standard

Chemicals in components	Same as the mandatory standard
Batteries	Same as the mandatory standard
Chemical Emissions	Same as the mandatory standard

IMPACT AREA	CLASS LEADER
Parts: facilitating segregation and recovery	N/A
Parts: facilitating segregation and recovery	N/A
Chemicals in components	N/A
Chemicals in components	N/A
Chemicals in components	N/A
Batteries	N/A
Chemical Emissions	N/A

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