BLUE ANGEL

The Environmental Label



Data Shredders

DE-UZ 174

Basic Award Criteria
Edition August 2012
Version 1

The Environmental Label is supported by the following four institutions:









The Federal Ministry for the Environment, Nature Conservation and Nuclear Safety is the owner of the label. It regularly provides information on the decisions taken by the Environmental Label Jury.

The German Environmental Agency with its specialist department for "Ecodesign, Eco-Labelling and Environmentally friendly Procurement" acts as office of the Environmental Label Jury and develops the technical criteria of the Basic Criteria for Award of the Blue Angel.

The Environmental Label Jury is the independent, decision-making body for the Blue Angel and includes representatives from environmental and consumer associations, trade unions, industry, the trade, crafts, local authorities, academia, the media, churches, young people and the German federal states.

The RAL gGmbH is the awarding body for the Environmental Label. It organises the process for developing the relevant award criteria in independent expert hearings – which involve all relevant interest groups.

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Prolongation without any change for 2 years, until 31.12.2017

Table of Contents

1	Introduction	3
1.1	Preface	3
1.2	Background	3
1.3	Objectives of the Blue Angel Eco-Label	4
1.4	Compliance with Basic Legal Provisions	4
1.5	Definitions	5
2	Scope	5
3	Requirements	5
3.1	Power Consumption	5
3.1.1	Power Switch and Power Consumption in Off Mode	5
3.1.2	Power Consumption Minimization	6
3.2	Safety	6
3.3	Noise Emissions	6
3.4	Material Requirements for the Plastics used in Housings and Housing Parts	7
3.5	Anti-Paper-Jam System / Technology	9
3.6	Separate Waste Receptacle	9
3.7	Warranty	9
3.8	Repairability and Spare Parts Supply	9
3.9	Easy-Disassembly Design	10
3.10	Consumer Information	10
4	Applicants and Parties Involved	11
5	Use of the Blue Angel Environmental Label	11

Specimen Contract



1 Introduction

1.1 Preface

The Environmental Label Jury has set up these Basic Criteria for Award of the Blue Angel Eco-Label in co-operation with the Federal Minister for the Environment, Nature Conservation and Nuclear Safety, Umweltbundesamt (Federal Environmental Agency) and considering the results of expert hearings conducted by RAL gGmbH. RAL gGmbH has been tasked with awarding the Environmental Label.

Upon application to RAL gGmbH and on the basis of a Contract on the Use of the Environmental Label to be concluded with RAL gGmbH the permission to use the Blue Angel eco-label may be granted for all products, provided that they meet the requirements specified hereinafter.

1.2 Background

Data shredders, as, for example, document shredders, are used to destroy confidential documents and paper files that are no longer needed by mechanically cutting them into very small pieces. Numerous shredder models, so-called multi-media shredders, do not only shred paper but also other data carriers, such as CDs / DVDs or credit cards and, thus, protect them from data misuse.

Type of cut, shred length and shred width of the shredder define the cutting level of the product – also called security level. There are seven security levels which are defined according to DIN 66399 "Office machines - Destruction of data carriers".

Shredders are always driven by electric motors and they vary in the simple spindle motor including a shaft mounted to the motor. The maximum power of data shredders for personal and small office use is between 130 and 700 watts. The maximum power of appliances for open-plan offices or office floors is between about 700 and 2600 watts.

The greater part of the annual power consumed by inefficient data shredders (90 to 97 %) is not consumed in active mode (paper shredding) but in "Off" and "Standby" mode. Data shredders may have a power consumption of up to 1.2 watts in Off mode and 2 to 3.5 watts in standby mode. They do not fall under the "Standby Regulation", i.e. 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. Depending on the utilization of the device the energy savings potential of an efficient data shredder may be 84 to 90 percent.

1.3 Objectives of the Blue Angel Eco-Label

Reduction of power consumption and avoidance of pollutants and waste are key objectives of environmental protection. The pursuit of these objectives can help protect our climate and conserve resources. The Blue Angel eco-label for data shredders may be awarded to products featuring the following environmental properties:

- low power consumption;
- long-lived design;
- avoidance of environmentally harmful materials

1.4 Compliance with Basic Legal Provisions

It is a matter of course for Blue Angel eco-labelled products to comply with current laws and regulations, especially with the following ones:

- EU Directives 2002/96/EC¹ and 2002/95/EC² regulating the disposal of appliances transposed into German law by the Elektro- and Elektronikgesetz (ElektroG) (Electrical and Electronic Equipment Act)³ are complied with. For precautionary reasons, the product meets material requirements going beyond these provisions.
- The substance requirements defined by the EU Chemicals Regulation REACH (1907/2006/EC)⁴ as well as Regulation EC No. 1272/2008⁵ (or Directive 67/548/EEC) are met.
- Low Voltage Directive (LVD) 2006/95/EC
- EMV Directive 2004/108/EC

Directive on Waste Electrical and Electronic Equipment (WEEE), Directive 2002/96/EC of the European Parliament and of the Council, dated 27 January 2003

Directive on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment, Directive 2002/95/EC, Official Journal No L 37, 13 February 2003

Gesetz über das Inverkehrbringen, die Rücknahme und die umweltverträgliche Entsorgung von Elektro- und Elektronikgeräten (Act on the placing on the market, return and environmentally sound disposal of waste electrical and electronic equipment), Federal Law Gazette 2005, Part I, No.17 (23 May 2005)

REGULATION (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006



• Produktsicherheitsgesetz (Product Safety Act) (ProdSG), of November 8, 2011

1.5 Definitions

Off Mode

Off mode means a condition in which the equipment is disconnected from the mains by a power switch and is not providing any function.

Active Mode

Active mode means a condition in which the equipment is connected to the mains power source and provides the following function:

Shredding of paper, CDs, DVDs, credit cards

Ready and Standby Modes

- 1) Ready mode: full functionality without operation of the motor.
- 2) Standby: means the condition to which the equipment after a preset time switches from ready mode.

2 Scope

These Basic Criteria apply to AC-powered data shredders, such as, for example, document shredders.

Excluded from the scope are devices and systems that need to be powered by threephase alternating current (400 volts).

3 Requirements

3.1 Power Consumption

3.1.1 Power Switch and Power Consumption in Off Mode

The device shall have a user-accessible power switch or limit power consumption in Off mode to 0 watts by appropriate measures (for example, mechanical micro switch).

Compliance Verification

The applicant shall declare compliance with the requirements in Annex 1 to the Contract and submit a corresponding test protocol prepared by a DIN EN ISO/IEC 17025 accredited testing laboratory (Annex 2). Test protocols prepared by the applicant will be accepted as equivalent if the latter uses a testing laboratory that has been accredited for these measurements by an independent body as SMT (Supervised



Manufacturers' Testing) laboratory. The measurement shall be made in accordance with DIN EN 50564.

3.1.2 Power Consumption Minimization

The shredder shall have an automatic switch-off function that switches the device from ready mode to a lower power consumption mode (standby mode). Power consumption in ready mode shall not exceed 2 Wh. Power consumption in standby mode shall not exceed 0.1 W.

Compliance Verification

The applicant shall declare compliance with the requirements in Annex 1 to the Contract and submit a corresponding test protocol prepared by a DIN EN ISO/IEC 17025 accredited testing laboratory (Annex 2). Test protocols prepared by the applicant will be accepted as equivalent if the latter uses a testing laboratory that has been accredited for these measurements by an independent body as SMT (Supervised Manufacturers' Testing) laboratory. The measurement shall be made in accordance with DIN EN 50564.

3.2 Safety

The data shredder shall carry the GS ("certified safety") Mark.

Compliance Verification

The applicant shall declare compliance with requirements in Annex 1 to the Contract and submit a valid mark award certificate (GS/VDE), (Annex 3).

3.3 Noise Emissions

The evaluation of noise emissions is based on the indication of the declared A-weighted sound power level L_{WAd} in decibel (dB). The A-weighted sound power level L_{WA} shall be determined on the basis of ISO 7779. The noise emissions shall be measured in the following operating modes:

- Idle (B1)
- Shredding of one A4 sheet weighing 80 g/m² (B2)
- Shredding at half the maximum sheet shred capacity (A4, 80 g/m²) (B3)
- Shredding at maximum sheet shred capacity (A4, 80 g/m²) (B4)

The measured value of one test run shall be determined from the noise level emitted from using the device for a minimum of 10 seconds in the respective operating mode. Each device shall be tested during at least five test runs in one operating mode. The



three highest measured values shall be energetically averaged and they result in the device-specific A-weighted sound power level L_{WA} for the respective operating mode.

To make sure that the measured sound power levels can be considered "declared" a minimum of three devices of one model need to be tested in each operating mode. The declared A-weighted sound power levels L_{WAd} shall be determined on the basis of ISO 9296:1988 and given in decibel (dB). Alternatively, if the noise measurement can be performed on only one device the declared A-weighted sound power level L_{WAd} may be determined using the following formula:

 $L_{WAd} = L_{WA1} + 3.0 \text{ dB}$

 $(L_{WA1} = A$ -weighted sound power level of one single device in dB)

The test result in idle mode shall be shown in the product documentation. The other test results shall be reported to the label-awarding agency.

Compliance Verification

The applicant shall declare compliance with requirement in Annex 1 to the Contract and submit a measurement protocol prepared by an ISO/IEC 17025 accredited testing laboratory or an accredited SMT laboratory. (Annex 4).

3.4 Material Requirements for the Plastics used in Housings and Housing Parts

The plastics must not contain as constituent parts any substances that are classified as

a) carcinogenic in categories 1 or 2 according to Table 3.2 or categories 1A and 1B according to Table 3.1 of Annex VI to Regulation (EC) No 1272/2008⁶

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives

classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006, Annex VI Harmonized classification and labelling for certain hazardous substances, Part 3: Harmonized classification and labelling – Tables, Table 3.2, – List of harmonized classification and labelling of dangerous substances from Annex I to Directive 67/548/EEC,

⁽short: GHS Regulation). http://www.reach-info.de/ghs_verordnung.htm, as amended.

The GHS Regulation (Global Harmonization System), that has come into force on January 20, 2009, replaces the old Directives 67/548/EEC and 1999/45/EC. According to the said regulation, substances are classified, labelled and packed until December 1, 2010 according to Directive 67/548/EEC (Dangerous Substances Directive) while mixtures are classified, labelled and packed until June 1, 2015 according to Directive 1999/45/EC (Dangerous Preparations Directive). Notwithstanding this, the classification, labelling and



- b) mutagenic in categories 1 or 2 according to Table 3.2 or categories 1A and 1B according to Table 3.1 of Annex VI to Regulation (EC) No 1272/2008
- c) reprotoxic in categories 1 or 2 according to Table 3.2 or categories 1A and 1B according to Table 3.1 of Annex VI to Regulation (EC) No 1272/2008
- d) being of very high concern for other reasons according to the criteria of Annex XIII to the REACH Regulation, provided that they have been included in the List (so-called "Candidate List⁷, as amended at the time of application) set up in accordance with REACH, Article 59, paragraph 1.

Halogenated polymers shall not be permitted. Neither may halogenated organic compounds be added as flame retardants. Moreover, no flame retardants may be added which are classified pursuant to Table 3.1 or 3.2 in Annex VI to Regulation (EC) 1272/2008 as very toxic to aquatic organisms with long-term adverse effect and assigned the Hazard Statement H 410 or Risk Statement R 50/53.

The following shall be exempt from this rule:

- process-related, technically unavoidable impurities;
- fluoroorganic additives (as, for example, anti-dripping agents) used to improve the physical properties of plastics, provided that they do not exceed 0.5 weight percent;
- plastic parts less than 25 grams in mass.

Compliance Verification

The applicant shall declare compliance with the requirements in Annex 1 and submit a written declaration from the plastic manufacturers or ensure the submission of such declaration to RAL gGmbH. Such declaration in Annex P-M shall confirm that the banned substances have not been added to the plastics and give the chemical

packaging of substances and preparations may be performed according to the provisions of the GHS Regulation already before December 1, 2010 or June 1, 2015, respectively. In such case, the provisions of Dangerous Substances Directive or Dangerous Preparations Directive shall not be applicable.

The Candidate List, as amended at the time of application (first-time application) shall be applicable. Link to the Candidate List in Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH): http://echa.europa.eu/web/guest/candidate-list-table



designation of the flame retardants used, including CAS No. and classifications (H statements).

The applicant shall name the housing plastics used for parts ≥ 25 grams in mass and submit a list of the housing plastics used pursuant to Annex P-L 25.

3.5 Anti-Paper-Jam System / Technology

The device shall feature either a system that prevents too much paper from being inserted into the device, thus causing malfunction or paper jam, or a reverse function (automatic or manual) with power cut-off in case of paper jam.

Compliance Verification

The applicant shall declare compliance with the requirements in Annex 1 to the Contract and submit the relevant product documentation (Annex 5).

3.6 Separate Waste Receptacle

Devices designed to not only shred paper but also CDs and DVDs (see Operating Instructions) shall be equipped with a separate waste receptacle to keep the plastic shreds separate from the paper shreds.

Compliance Verification

The applicant shall declare compliance with the requirements in Annex 1 to the Contract.

3.7 Warranty

The applicant undertakes to offer a 2-year warranty on the entire product.

The cutting roller of a security level 1-5 shredder (according to DIN 66399) shall be warranted against breakage for 8 years and the cutting roller of a security level 6-7 shredder shall be warranted against breakage for 2 years. The product literature shall include warranty details.

Compliance Verification

The applicant shall declare compliance with the requirements in Annex 1 to the Contract and submit the relevant pages of the product documentation (Annex 5).

3.8 Repairability and Spare Parts Supply

The applicant undertakes to make sure that the spare parts supply for equipment repair will be guaranteed for at least 8 years (typical product lifetime) after end of production.



Spare parts are those parts which, typically, may break down within the scope of the ordinary use of a product - whereas those parts which normally exceed the life of the product are not to be considered as spare parts.

The product documentation shall include information on the above requirements.

Compliance Verification

The applicant shall declare compliance with the requirements in Annex 1 to the Contract and submit the relevant pages of the product documentation (Annex 5).

3.9 Easy-Disassembly Design

The devices shall be so designed as to allow future disassembly with a view to achieving the highest possible recycling rates. This means that

- connections must be easy to separate using universal tools and joints must be easily accessible,
- disassembly instructions must be made available to end-of-life recyclers with the aim to recover as many resources as possible.

Compliance Verification

The applicant shall declare compliance with the requirements in Annex 1 to the Contract and submit corresponding disassembly instructions for end-of-life recyclers (Annex 6).

3.10 Consumer Information

The product documentation included with the devices shall include both the technical specifications and the environment and health-related user information. The following basic user information shall be included in the product documentation as well as made available on the manufacturer's website:

- Information on the necessity for regular maintenance or oiling of the shredder in order to maintain proper product performance
- 2. Noise emission details
- 3. Power consumption data (according to para. 3.1.2)
- 4. Note advising to use the power switch (if available) to turn the device off during periods of non-use
- 5. Note saying that shredded credit cards should be disposed of separately.

Compliance Verification

The applicant shall declare compliance with the requirement in Annex 1 to the Contract and submit the relevant pages of the product documentation (Annex 5).



4 Applicants and Parties Involved

- **4.1** Manufacturers or distributors of products under para. 2 shall be eligible for application.
- **4.2** Parties involved in the award process are:
 - RAL gGmbH to award the Blue Angel eco-label,
 - the federal state being home to applicant's production site,
 - Umweltbundesamt (Federal Environmental Agency) which after the signing of the contract receives all data and documents submitted in application for the Blue Angel in order to be able to further develop the Basic Award Criteria.

5 Use of the Blue Angel Environmental Label

- 5.1 The terms governing the use of the Environmental Label by the applicant are stipulated by a Contract on the Use of the Environmental Label to be concluded with RAL gGmbH.
- **5.2** Within the scope of such contract the applicant undertakes to comply with the requirements under paragraph 3 while using the environmental label.
- 5.3 Contracts on the Use of the Environmental Label are concluded to fix the terms for the certification of products under paragraph 2. Such contracts shall run until December 31, 2017.
 - They shall be extended by periods of one year each, unless terminated in writing by March 31, 2017 or March 31 of the respective year of extension.
 - After the expiry of the contract the Environmental Label may neither be used for labelling nor for advertising purposes. This regulation shall not affect products being still in the market.
- 5.4 The applicant (manufacturer) shall be entitled to apply to RAL gGmbH for an extension of the right to use the eco-label to the product entitled to the label if it is to be marketed under another brand/trade name and/or other marketing organizations.
- **5.5** The Contract on the Use of the Environmental Label shall specify:
- **5.5.1** Applicant (manufacturer/distributor)
- **5.5.2** Brand / trade name, product designation
- **5.5.3** Distributor (label user), i.e. the marketing organization under para. 5.4

CONTRACT

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on the Award of the Blue Angel Environmental Label

RAL gGmbH as the label-awarding agency and the firm of (Distributor)

as applicant conclude the following Contract on the Use of the Environmental Label:

 The applicant shall - under the following conditions be entitled to use the Environmental Label forming the basis of this Contract for the labelling of the product / product group / project:

"Data Shredders"

"(Brand/Trade name)"

This shall not include the right to use the Environmental Label as part of a brand. Unless otherwise agreed, the Environmental Label shall only be used in the above given shape and colour and shall be marked at the bottom "Jury Umweltzeichen" (Environmental Label Jury). The entire inner surrounding text shall always be identical as regards font size, form, thickness and colour and it shall be easy to read.

- The Environmental Label according to para. 1 may only be used for the above-mentioned product / product group / project.
- 3. If the Environmental Label is used for advertising purposes or other applicant activities the applicant shall make sure that it is exclusively used in connection with the above-named product / product group / project for which the use of the Environmental Label has been granted and settled under this contract. The applicant shall be solely responsible for the way the label is used, above all, in advertising.
- 4. During the entire period of label use the product / product group / project to be labelled shall comply with all requirements and conditions for the use of the label as specified in the "Grundlage für Umweltzeichen-Vergabe RAL-UZ 174" (Basic Criteria for Award of the Environmental Label RAL-UZ 174), as amended. This shall also apply to the reproduction of the Environmental Label (including surrounding text). Claims for damages against RAL gGmbH, especially on the grounds of third party objections to applicant's use of the label and the accompanying advertising shall be ruled out.
- If the "Basic Criteria for Award of the Environmental Label" provide for checks by third parties the applicant shall bear the costs accruing in connection therewith.

SPECIMEN

- 6. Should the applicant himself or third parties find out that the applicant does not comply with the conditions as stipulated in paras. 2-5 the applicant shall be liable to inform RAL gGmbH and stop the use of the Environmental Label until the conditions are complied with again. Should the applicant be incapable of restoring the state required for the use of the label immediately or should the applicant seriously offend against this contract RAL gGmbH may, if necessary, withdraw the Environmental Label and prohibit the applicant from using the label any longer. Claims for damages against RAL gGmbH because of the withdrawal of the label shall be ruled out.
- The Contract on the Use of the Environmental Label may be terminated for good reason.
 Examples of good reasons are:
 - unpaid contributions
 - substantiated risk of injury and death.
 - In such case, applicant's continued use of the Environmental Label shall be prohibited. The applicant shall not be entitled to bring a claim for damages against RAL gGmbH (see above: paragraph 6, sentence 3).
- The applicant undertakes to pay RAL gGmbH an amount according to the "Entgeltordnung für das Umweltzeichen" (Schedule of Fees for the Environmental Label), as amended, for the period of use.
- 9. According to the Basic Criteria for Award of the Environmental Label RAL-UZ 174 this contract will run until December 31, 2017. It shall be extended by periods of one year each, unless terminated in writing by March 31, 2017 or by March 31 of the respective year of extension. After the expiry of the contract the Environmental Label may neither be used for labelling nor for advertising purposes. This regulation shall not affect the products being still in the market.
- 10. Products / projects marked with the Environmental Label and the advertising for these products / projects may reach the consumer only when naming the company of the

(Applicant/Distributor).

Sankt Augustin, this day	/ of	20
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Place, Date

RAL gGmbH Management (Signature of authorised person and company stamp)