Criteria for the award of Green Product Mark Refrigerator

2 PfG E 0037/01.2024

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Contents

Foreword

The work of selecting and developing criteria for the award of Green Product Mark is carried out through Global 2PfG-E Technical Committees (PTC) convened by TÜV Rheinland. Interested parties participate in the selection and development of criteria for the award of Green Product Mark through either PTC membership or stakeholder consultation mechanism.

Criteria for the award of Green Product Mark are drafted in accordance with the rules given in following standards and guides:

- ISO/IEC Directives, Part 1 and Part 2
- ISO/IEC Guide 21, Part 1 and Part 2
- ISO Guide 64
- ISO Guide 82
- ISO 14024
- US EPA Guidelines for Environmental Performance Standards and Ecolabels for Use in Federal Procurement
- ISEAL Code of Good Practice for Setting Social and Environmental Standards

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. TÜV Rheinland shall not be held responsible for identifying any or all such patent rights.

This document was developed using a multi-stakeholder approach involving experts from multiple stakeholder groups including but not limited to consumers, government, industry, labour, non-governmental organizations (NGOs), and service, support, research, academics. Although efforts were made to ensure balanced participation of all the stakeholder groups, a full and equitable balance of stakeholders was constrained by various factors, including the availability of resources and the need for English language skills.

In this standard, Modified and deletions are in strikethrough red text.
A separate Final version with all changes accepted is available in this publication.

The principal changes in this edition as compared with the 2 PfG E 0037/01.2024 Rev 1.0 are as follows (minor changes are not listed):
– clarified Clause 3.1 requirements for Green Product Mark.
– additional requirements for Clause 4.1 Social compliance.
– modified requirements for Clause 5.1 WEEE Directive and Restriction of hazardous substances.
– deleted requirements for Clause 5.1 Recycled (post-consumer) plastic material content.
– clarified Clause 5.2 requirements for Product climate resilience.
– additional requirements for Clause 5.5 Product Safety with radio equipment.
– modified requirements for Clause 5. 6 Energy Efficiency and Noise.

Introduction

Product environmental labels are claims which indicate the environmental aspects of a product and provide information about a product in terms of its overall environmental character, a specified environmental aspect, or any number of aspects. Green Product Mark is a voluntary environmental labelling scheme operating in accordance with ISO 14020 *Environmental labels and declarations – General principles* and ISO 14024 *Environmental labels and declarations – Type I environmental labelling – Principles and procedures*. Green Product Mark has been developed in accordance with ISO/IEC 17067 *Conformity assessment – Fundamentals of product certification and guidelines for product certification schemes*. Certification activities under Green Product Mark scheme shall be performed in accordance with ISO/IEC 17065 *Conformity assessment – Requirements for bodies certifying products, processes and services*.

Through the communication of verifiable and accurate information on environmental aspects of products, Green Product Mark aims to encourage the demand for and supply of those products that cause less stress on the environment, thereby stimulating the potential for market-driven continuous environmental improvement.

Green Product Mark certification scheme is owned by TÜV Rheinland, a leading international technical service provider who have been developing solutions to ensure the safety, quality and economic efficiency of the interaction between man, technology and the environment.

This document is intended to convey clear and unambiguous requirements to be fulfilled for products to get awarded with Green Product Mark.

1 Scope

This document lays out prerequisites, product environmental criteria and product function characteristics that a refrigerator freezer (if wireless function is employed the it is limited to either Wi-Fi 2.4 GHz or Bluetooth only) shall comply with, in order to get awarded with Green Product Mark.

All products which demonstrate compliance with relevant prerequisites, product environmental criteria and product function characteristics set forth in this document are entitled to be awarded Green Product Mark.

2 Normative references

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

- SA 8000 Social Accountability
- ISO 14001 Environmental Management Systems-Requirements with Guidance for use
- Product Environmental Footprint (PEF) Guide
- 2001/95/EC General Product Safety Directive
- Low Voltage Directive 2014/35/EU
- EN 60335-1 Household and similar electrical appliances – Safety – Part 1: General requirements
- EN 60335-2-24 Household and similar electrical appliances – Safety – Part 2-24: Particular requirements for refrigerating appliances, ice-cream appliances and ice-makers
- EN 62233 Measurement methods for electromagnetic fields of household appliances and similar apparatus with regard to human exposure
- EMC Directive 2014/30/EU
- EN 55014-1 Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emission
- EN 55014-2 Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 2: Immunity - Product family standard
- EN IEC 61000-3-2 Electromagnetic compatibility (EMC) –Part 3-2: Limits – Limits for harmonic current emissions (equipment input current ≤16 A per phase)
- EN 61000-3-3 Electromagnetic compatibility (EMC) –Part 3-3: Limits – Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection

- Radio Equipment (RED) Directive 2014/53/EU
- EN 300 328 V2.2.2:2019 Wideband transmission systems; Data transmission equipment operating in the 2,4 GHz band; Harmonised Standard for access to radio spectrum
- EN 301 489-1 V2.2.3:2019 ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements; Harmonised Standard for ElectroMagnetic Compatibility
- EN 301 489-17 V3.2.6:2023 ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for Broadband Data Transmission Systems; Harmonised Standard for ElectroMagnetic Compatibility
- EN 62311:2008 Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz to 300 GHz)
- EN IEC 62311:2020 Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz to 300 GHz)
- EN 50663:2017 Generic standard for assessment of low power electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (10 MHz - 300 GHz)
- EN 62479:2010 Assessment of the compliance of low power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (10 MHz to 300 GHz)
- EN 50665:2017 Generic standard for assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz - 300 GHz)
- EN 62552-1:2020 Household refrigerating appliances – Characteristics and test methods –Part 1: General requirements
- EN 62552-2:2020 Household refrigerating appliances – Characteristics and test methods –Part 2: Performance requirements
- EN 62552-3:2020 Household refrigerating appliances – Characteristics and test methods –Part 3: Energy consumption and volume
- COMMISSION REGULATION (EU) 2019/2019 with amendment (EU) 2021/341
- COMMISSION DELEGATED REGULATION (EU) 2019/2016 with amendment (EU) 2021/340.
- EN 60704-1:2021 Household and similar electrical appliances -Test code for the determination of airborne noise - Part 1: General requirements
- EN 60704-2-14:2013+A1:2019 +A2:2024 Household and similar electrical appliances - Test code for the determination of airborne acoustical noise - Part 2-14: Particular requirements for refrigerators, frozen-food storage cabinets and food freezers
- ISO 14040, Environmental management -- Life cycle assessment – Principles and framework
- ISO 14044, Environmental management – Life cycle assessment – Requirements and guidelines
- ISO 14067, Carbon footprint of products – Requirements and guidelines for quantification and communication
- ISO 14021, Environmental labels and declarations–Self-declared environmental claims (Type II environmental labelling)
- Directive 2012/19/EU (WEEE Directive) and its amendments

- Directive 2011/65/EC (RoHS Directive) and its amendments
- Regulation (EU) No 1907/2006 (REACH Regulation) and its amendments
- Regulation (EU) No 2019/1021 on persistent organic pollutants (POP Regulation) and its amendments
- POP Regulation (EC) No 850/2004
- ISO 11469, Generic identification and marking of plastics products
- Packaging and packaging waste Directive 94/62/EC
- Regulation (EC) No 2037/2000 of the European Parliament and of the Council of 29 June 2000 on substances that deplete the ozone layer
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3 Terms and definitions

For the purpose of this document, the following terms and definitions apply.

3.1 Green Product Mark

A voluntary environmental labelling program owned by TÜV Rheinland to indicate the overall environmental prefer ability of a product within a particular product category based on life cycle considerations and aim to communicate verifiable and accurate information on environmental aspects of products.

Green Mark certificates with environmental related keyword shall be limited to max. 12 month validity and contain the text “this certificate should not be used when Green Claim Directive/regulation entered into force”.
Decision about the sentence in the certificate:
“This certificate should not be used when Green Claim Directive/regulation entered into force”
Note: Renew should be performed in the second and third year. And then a new green mark certificated should be created if application.

3.2 Refrigerator freezer

A combi appliance that has at least one freezer compartment and at least one fresh food compartment.

3.3 Pre-requisites

Preconditions that a product shall comply with to be awarded Green Product Mark, which in principle consist of two pillars: legislative/regulatory requirements that the product shall meet in order to access target market; social compliance requirements prescribed to the site where the product has been manufactured.

3.4 Product environmental criteria

Environmental requirements that the products shall meet in order to be awarded an environmental label. [SOURCE: ISO 14024: 1999, definition 3.4]
Within this document, product environmental criteria are listed under chapter 5, and the products shall meet all the requirements to be awarded the Green Product Mark.

3.5 Product function characteristics

Attribute or characteristic in the performance and use of a product. In the context of environmental labelling, fitness for purpose implies that a product satisfies health, safety and consumer performance needs. [SOURCE: ISO 14024: 1999, definition 3.5]

4 Prerequisites

4.1 Social compliance

The social compliance of brand owner, manufacturer and production site shall be maintained with all statutory and regulatory requirements for the jurisdiction in which the manufacturing operations are located.

Methodology for assessing and demonstrating compliance:
The Brand owner, manufacturer and the factory/third-party producer shall:

- Fulfil the requirements of SMETA or BSCI by providing a documented proof of SMETA or BSCI audit report conducted at production facility of Green Mark certified products; or
- Fulfil the requirements of SA8000 by providing a valid SA8000 certificate issued by a SAAS-accredited certification body or a COC audit report issued by TÜV Rheinland; or
- Fulfil the requirements of RBA by providing a documented proof of RBA VAP audit report conducted at production facilities of Green Mark certified products; or
- Submit a report developed according to the GRI Sustainability Reporting Guidelines or GRI Sustainability Reporting Standards.

The documented proof/report shall be maximum of 12 months old at the time of application for Green Product Mark certification.

4.2 Environmental compliance

All production facilities must assure compliance with the applicable national and local legal environmental law and regulations applicable to their processing/manufacturing stage.

Methodology for assessing and demonstrating compliance:

The manufacturer and factory shall fulfil the environmental requirements by providing a valid ISO 14001 or EU EMAS Certificate(s).

5 Product environmental criteria

5.1 Restriction of hazardous substances

Requirement	Regulation	Limit
WEEE Directive	Directive 2012/19/EU and amendments	Recovery: 85%; Reuse and recycling: 80%

Requirement	Regulation	Limit
Odour	In house-method with reference to SNV 195651, Rating scale 1~5	Grade 2 (in operation)
RoHS	Directive 2011/65/EU and amendments	The product shall meet the substance restriction requirements of the European RoHS Directive, using the version which is in force at the time the product is declared to conform to this standard. All exemptions to the substances restrictions as defined by the Directive are applicable. In addition, a RoHS Declaration of Conformity to Directive 2011/65/EC shall be provided by the applicant
Substances of Very High Concern (REACH SVHC)	REACH Regulation (EU) No 1907/2006	Refers to 0.1 % for articles and packaging material
Phthalates	With reference to Regulation (EC) No 1907/2006 Annex XIV and XVII, Candidate list	Refers to 0.1 % for each homogenous material of the product
Alkylphenols and Alkylphenolethoxylates	With reference to REACH Regulation (EC) No 1907/2006	100 mg/kg each (NP/OP) / 100 mg/kg each (NPEO/OPEO)
Organotin Compounds	With reference to REACH Regulation (EC) No 1907/2006	0.1 mg/kg :TBT; 1 mg/kg: MBT, DBT, DOT (accessible materials)

Requirement	Regulation	Limit
Pentachlorophenol (PCP)	Regulation (EU) No 2019/1021 on persistent organic pollutants (POP) Annex I	Pentachlorophenol shall not be used in any part
Flame retardants (PBBs, PBDEs, TRIS, TEPA)	With reference to REACH Regulation (EC) No 1907/2006	1000 mg/kg (All materials except metals, glass, ceramic and wood)
Cadmium	With reference to REACH Regulation (EC) No 1907/2006	100 mg (accessible materials)
Lead	With reference to REACH Regulation (EC) No 1907/2006	90 mg/kg (accessible non-metal materials)
PAH (Polycyclic Aromatic Hydrocarbons)	15 PAH according to AfPS GS 2019:01 PAK	Requirements set by AfPS
Halogen	IEC 61249-2-21 and IPC-4101B	Cl, Br: 1000 mg/kg (in each material) All Printed circuit board (PCB) and substrate laminates shall meet Br and Cl requirements for low halogen as defined in IEC 61249-2-21 and IPC-4101B per 1a (refer to IEC and IPC standards for actual requirements). The maximum total halogens contained in the plastic parts exceeding 25 g, resin plus reinforcement matrix should be less than 1500 ppm with a maximum chlorine of 900 ppm and maximum bromine being 900 ppm. For plastic parts exceeding 25 g manufacturer shall provide a declaration which declares the materials used in the production meet the above-seen requirement
Packaging testing	Directive 94/62/EC and amendments	Pb+ Hg+ Cd+ Cr(VI) < 100 mg/kg

Requirement	Regulation	Limit
Mercury	DIN EN 1483	Not allowed for a backlight unit.
Beryllium	DIN EN ISO 11885	0.1 % each in finished part of the product (respectively sub-products separated without tools) and each packaging separately.
Antimony		
Short chain Chlorinated Paraffins C10-C13 (SCCP)	Regulation (EU) No 2019/1021 on persistent organic pollutants (POP) Annex I	0.1 % in each finished material and packaging (made of PVC, soft plastic and leather material)
Hexabromocyclododecane (HBCDD)	Regulation (EU) No 2019/1021 on persistent organic pollutants (POP) Annex I	0.01 % in each finished material and packaging (made of EPS and PS foams)
Packaging material (MOSH and MOAH)	French Arrêté du 13 avril 2022	Ban on the use of mineral oils in printing ink: · 1 % Aromatic mineral oil hydrocarbons (MOAH) with 1 to 7 aromatic rings; From January 1, 2025, the ban applies to the use of mineral oils: · For MOAH, if the printing ink contains more than 0.1 % or the mass concentration of compounds with 3 to 7 aromatic rings in the printing ink is more than 1 ppm (mg/kg); For MOSH, the limit value in the printing ink is 0.1 %.

Requirement	Regulation	Limit
Per- and polyfluoroalkyl substances (PFAS)	With reference to proposed EU and US ban on the use of PFAS	All plastic, rubber materials and substrate laminates shall meet requirements for PFAS. From Nov.1, 2024 all certified products shall meet the requirement. 1, 25 ppb for any PFAS as measured with targeted PFAS analysis (polymeric PFASs excluded from quantification) 2, 250 ppb for the sum of PFASs measured as sum of targeted PFAS analysis, optionally with prior degradation of precursors (polymeric PFASs excluded from quantification) 3, 50 ppm for PFASs (polymeric PFASs included). If total fluorine exceeds 50 mg F/kg the manufacturer, importer or downstream user shall upon request provide to the enforcement authorities a proof for the fluorine measured as content of either PFASs or non-PFASs. For plastic parts exceeding 25 g (10 g cell phones) manufacturer shall provide a declaration which declares the materials used in the production meet the above-seen requirement.
Endocrine Disrupting Chemicals (EDCs)	With Reference to I of article L. 5232-5 of the French Public Health Code and NOR : TREP2323345A	0.1 % for non-metal materials
Food contact materials and Products	Lebensmittel-, Bedarfsgegenstaende- und Futtermittelgesetzbuch (LFGB)	Each material has its specific maximum permissible limits.
	Regulation (EC) No 1935/2004	Sensorial Examination (Taste) < 3

Requirement	Regulation	Limit
	Regulation (EU) No 10/2011	Overall Migration <10 mg/dm2 or 60 mg/kg Specific Migration of Heavy Metals according to Annex II Each plastic material has specific maximum permissible limits.
	Kunststoffe im Lebensmittelverkehr, Empfehlungen des Bundesinstituts für Risikobewertung (BfR)	Colorfastness - No deviation after testing Each plastic and silicone material as well as paper, cardboard, has specific maximum permissible limits
	EDQM Document on Metals and alloys used in food contact materials and articles	Specific maximum permissible migration limits for certain heavy metals from metal articles.
	Austrian Ceramic Regulation BGBl. Nr. 893/1993 & BGBl.II Nr.259/2006	Specific maximum permissible migration limits for heavy metals in Ceramic material in contact with food
Food grade (for food contact materials) except German markets	Italian Ministerial Decree of 21 March 1973 and its amendments	Please refer to national law
	DGCCRF N°2004-64 of May 6, 2004 and its amendments	Please refer to national law

For restricted substances, where a substitution at the time being due to missing alternatives is not possible, an exemption maybe granted. To support this exemption the supplier has to provide technical assessment and relevant documents

Methodology for assessing and demonstrating compliance:

The applicant provides a certificate(s) or accredited test report, which shows compliance with the legal requirement of each respective substance. TÜV Rheinland reviews that limits are kept. Alternatively, TÜV Rheinland evaluates the values by the provided product data from the manufacturer.

The TRLP (TÜV Rheinland LGA Products GmbH) reserves the right to accept existing reports issued by accredited laboratories.

5.2 Product climate resilience

The producer shall quantify/assess the total GHG emission associated with the product throughout its life cycle, expressed as CO_2 equivalents and base on a life cycle assessment using the impact category of climate change.
Quantification of the carbon footprint of a product will assist in the understanding and action to increase GHG removals and reduce GHG emissions throughout the life cycle of a product, facilitating the development and implementation of carbon emission management strategies and plans across product life cycles, as well as the detection of additional efficiencies in the supply chain.

Methodology for assessing and demonstrating compliance:

The applicant shall provide a report of Product Carbon Footprint (PCF) based on ISO 14067. The report shall be issued by TÜV Rheinland.

5.3 Product recycled material content

5.3 Product recycled material content

Recycled material content of final product shall be evaluated according to ISO 14021.
Calculation of the percentages of more sustainable material based on the article weight.
The percent of recycled material content of plastic parts (excluding PCB, cable, label and electronic components) of the product should be recorded.
Considering that the refrigerator is in the food contact category, the maximum proportion of recycled materials is determined under safe and hygienic conditions.

5.4 Product Packaging and accessory (not part of consumer products)

5.4 .1 Recycled material content

A) For the components or parts having a mass more than 8% per total packaging weight, need to use post-consumer recycled material.
B) And recycled part need to be marked making it possible to identify the substances: E.g. ___% recycled paper; and can be recyclable.
C) The recycled part content need to be more than 80%, and needs to be made from post-consumer recycled materials.

5.4 .2 Prevention by source reduction

A) Packaging design shall be compliant with the essential requirement by Annex II 94/62/EC directive: essential requirement on the composition and the reusable and recoverable, including recyclable, nature of packaging;

B) All packaging material shall be compliant with the heavy metal limit requirement by 94/62/EC packaging directive, sum of Pb, Hg, Cd and CrVI no more than 100ppm;
C) All packaging material shall be compliant with REACH requirement, e.g.: SVHC, Annex XVII requirement;
D) All packaging material shall be compliant wiht Regulation (EC) No 519/2012 (POPs), e.g.: Chain Chlorinate Paraffin, SCCP, Hexachlorobutadiene (HCBD), Perfluorooctane sulfonate (PFOS), Short etc.;
E) All pacakging material shall be compliant with the Toxics in Packaging Clearinghouse (TPCH), Prohibition of sale or distribution of a package or packaging components containing PFAS;
F) Halogenated organic plastics, e.g: PVC, shall be prohibited for packaging;
G) Metallic coatings on the packaging shall be prohibited.

5.5 Product Safety

Compliance shall be maintained with safety requirements set forth in statutory regulations for the jurisdiction in which Green Product Mark certified products will be sold.

Requirement	Regulation	Limit
Safety and EMC	**EU market: CE certificate** Low Voltage Directive 2014/35/EU EN 60335-1 EN 60335-2-24 EN 62233 EMC Directive 2014/30/EU EN 55014-1 EN 55014-2 EN IEC 61000-3-2 EN 61000-3-3 Or Radio Equipment (RED) Directive 2014/53/EU EN 60335-1 EN 60335-2-24 EN 62233 EN 55014-1 EN 55014-2 EN IEC 61000-3-2 EN 61000-3-3 Radio Article （RF） EN 300 328 V2.2.2:2019 EN 301 489-1 V2.2.3:2019 EN 301 489-17 V3.2.6:2023	- Safety mark approval with FI valid within 12 months - (Plus Electrical safety standards and EMC standards as above listed in requirement ‘Safety and EMC) With the latest version. - The certificate and report should be issued by TUV R.

Requirement	Regulation	Limit
	Exposure of Humans to Electromagnetic Fields (EMF) EN 62233:2008 EN 62311:2008 EN IEC 62311:2020 EN 50663:2017 EN 62479:2010 EN 50665:2017 **German market: GS certificate** **Asia market: CB** IEC 60335-1 IEC 60335-2-24	

5.6 Energy Efficiency and Noise

Compliance shall be maintained with ERP requirements set forth in statutory regulations for the jurisdiction in which Green Product Mark certified products will be sold.

Product destination	Energy consumption requriement	Limit
ERP	EN 62552-1:2020, EN 62552-2:2020, EN 62552-3:2020, COMMISSION REGULATION (EU) 2019/2019 with amendment (EU) 2021/341, COMMISSION DELEGATED REGULATION (EU) 2019/2016 with amendment (EU) 2021/340. Sound power level test: EN 60704-1:2021 EN 60704-2-14:2013+A1:2019 +A2:2024	- Energy efficiency class need to comply with Class A or B or C. - Airborne acoustical noise emission class to comply with Class A or B or C. - The report should be issued by TUV R.
Singapore Energy	IEC 62552-1:2015+AMD1:2020; IEC 62552-3:2015+AMD1:2020;	At least 3 ticks - The report should be issued by TUV R.

Product destination	Energy consumption requriement	Limit
Chile Energy	IEC 62552:2007 Oficio Circular N°13221/01.12.2014 "Instruye Procedimiento de ensayos de Eficiencia Energética para Refrigeradores" – P-DTP-EREF-01/21.11.2014; PE N°1/17/2	At least A++ class - The report should be issued by TUV R.
Australia Energy	GEMS(Household Refrigerating Appliance) Determination 2019, AS/NZS 4474:2018+A1:2019, AS/NZS IEC 62552.1:2018, AS/NZS IEC 62552.2:2018, AS/NZS IEC 62552.3:2018	At least 3.5 star - The report should be issued by TUV R.
Ghana Energy	L.I.2441: Energy Commission(Energy efficiency standards and labelling)(Refrigerating appliances)Regulations,2022, GS IEC 62552-1:2015, GS IEC 62552-2:2015, GS IEC 62552-3:2015	At least 5 star - The report should be issued by TUV R.
UAE Energy	UAE.S IEC 62552 -1: 2023, UAE.S IEC 62552 -2: 2023, UAE.S IEC 62552 -3: 2023, UAE.S 5010-3: 2024	At least 3 star - The report should be issued by TUV R.
Argentina Energy	IEC 62552:2007 IRAM 2404-2:2000 IRAM 2404-3:2015	At least A++ - The report should be issued by TUV R.
Iraq Energy	IEC 62552:2007 Iraqi general technical requirements for the imported products (Eng.159)	At least A+

5.7 Reduction of ozone depletion potential (ODP) of refrigerants and foaming agents

The refrigerants in the refrigerating circuit and foaming agents used for the insulation of the appliance shall have an ozone depletion potential equal to zero.

The use of CFCs and HCFCs as refrigerants and for the production of foaming agents in new equipment and their placing on the market is not permitted under Regulation 2037/2000/EC.

5.8 Reduction of global warming potential (GWP) of refrigerants and foaming agents

The refrigerants in the refrigerating circuit and foaming agents used for the insulation of the appliance, shall have a global warming potential equal to, or lower than, 15 (rated as CO2 equivalents over a period of 100 years).
The applicant shall declare compliance of the product with these requirements. The applicant and/or his supplier or suppliers, as appropriate, shall indicate to the Competent Body assessing the application which refrigerants and foaming agents have been used and details of their global warming potential.

5.9 Life time extension

The availability of compatible replacement parts and service shall be guaranteed for 12 years from the time that production ceases.

6 Product function characteristics

6.1 User instructions

The appliance shall be sold with an instruction manual, which provides advice on the correct environmental use:
6.1. The following text on the cover page or first page: 'Information on how to minimise environmental impacts is given in this manual.'
6.2. Recommendations for optimal use of energy in the operation of the appliance, including:
6.2.1. guidelines concerning the placing or installation of the appliance, amongst others, stating the minimum dimensions of free space around the appliance needed to ensure sufficient circulation of air, and also indicating that where the consumer has the possibility, significant energy savings can be achieved by placing the appliance in an unheated or less heated location;
6.2.2.advice that the consumer should avoid placing the appliance next to any heat source (such as ovens, radiators, etc.) or in direct sunlight; advice that, where relevant, the consumer should consider insulating the appliance from wall or under floor heating sources;
6.2.3. advice that the thermostat setting is dependent on the ambient temperature and therefore, the temperature setting should be checked by using an appropriate thermometer (explanation on how to proceed should be provided);
6.2.4. advice that hot foodstuffs should be allowed to cool down before placing in the appliance, as the steam from the foodstuffs contributes to the icing up of the evaporator unit, but that the cooling period, however, should be as short as possible for health and hygiene reasons;
6.2.5. advice that the evaporator unit should be kept clean from thick layers of ice and that frequent defrosting facilitates the removal of the ice cover;
6.2.6. advice that the sealing of the door should be replaced when not functioning properly;

6.2.7. advice that when moving the appliance sufficient time should be allowed before switching it on again;
6.2.8. advice that the condenser on the back of the appliance and the space underneath the appliance should be kept clean from dust and kitchen debris;
6.2.9. Information that ignoring the issues mentioned above will lead to higher energy consumption and therefore higher running costs.
6.3. Advice that any damage to the condenser (heat-exchanger) on the back of the appliance, or other events leading to exposure of the refrigerant to the environment, should be avoided because of potential environmental and health risks. The manual shall specifically mention that sharp objects (such as knives, screwdrivers, etc. should not be used for removing ice as they could damage the evaporator unit.
6.4. Information that the appliance is made of parts and materials, including fluids, which are reusable and/or recyclable.
6.5. Advice on how the consumer can make use of the manufacturer's take-back offer.
The applicant shall declare compliance of the appliance with these requirements. The applicant shall provide the Competent Body assessing the application with a copy of the instruction manual.

6.2 Information for User

information that the product has been awarded the Green Product Mark, including a summary of the major features for award of the Green Product Mark on a separate page and a link to: www.tuv.com/world/en/green-product-mark.html

6.3 Product characteristics

Product functions, dimensions and weight to be recorded.