

# Ministerial Order to Provide Technical Standards for Electrical Appliances and Materials

(Order of the Ministry of Economy, Trade and Industry No. 34 of July 1, 2013)

In accordance with the provisions of Article 8, paragraph (1) of the Electrical Appliances and Materials Safety Act (Act No. 234 of 1961), a ministerial order to amend the Ministerial Order to Provide Technical Standards for Electrical Appliances and Materials (Order of the Ministry of Economy, Trade and Industry No. 85 of 1962) in its entirety is hereby prescribed as follows.

## Table of contents

- Chapter I General Provisions (Article 1)
- Chapter II General Requirements (Articles 2 to 6)
- Chapter III Protection against Hazards (Articles 7 to 17)
- Chapter IV Noise Level (Article 18)
- Chapter V Labels (Articles 19 and 20)
- Supplementary Provisions

## Chapter I General Provisions

Article 1 This Ministerial Order is to provide technical standards to be prescribed by Order of the Ministry of Economy, Trade and Industry as prescribed in Article 8, paragraph (1) of the Electrical Appliances and Materials Safety Act.

## Chapter II General Requirements

(Safety Principle)

- Article 2 (1) Electrical appliances and materials are to be designed to mitigate the risk of causing personal injury or property damage under normal use.
- (2) Electrical appliances and materials are to be properly designed in terms of shape, well assembled, and operated smoothly in order to ensure their safety.

(Design with Safety Functions)

- Article 3 (1) In furtherance of the principles set out in the preceding Article, electrical appliances and materials are to be designed to have safety functions to prevent the occurrence of hazardous conditions and minimize damage that may arise when the conditions occur.
- (2) If it is found to be difficult to ensure the safety of electrical appliances and

materials only by taking measures under the provisions of the preceding paragraph, information and instructions for use necessary to ensure the safety of electrical appliances and materials are to be displayed or described on them or in the instruction manuals, etc. provided with them.

(Maintenance of Safety Functions during In-service Period)

Article 4 Electrical appliances and materials are to be configured so as to maintain their safety functions during their normally expected in-service period.

(Safety Design Based on Users and Places of Use)

Article 5 Electrical appliances and materials are to be designed to mitigate the risk of causing physical injury or property damage in consideration of the expected users and places of use, and are to be labeled appropriately as may be necessary.

(Use of Components and Materials with Heat Resistance)

Article 6 Electrical appliances and materials are to be made using components and materials with appropriate heat resistance, insulation properties and any other properties according to their normally expected environment of use.

### **Chapter III Protection against Hazards**

(Protection against Electric Shocks)

Article 7 Electrical appliances and materials are to incorporate the following measures to mitigate the risk of electric shocks in accordance with the conditions of the place of use and the electrical voltage:

- (i) prevent human contact to hazardous live parts, and as may be necessary, appropriately protect these parts from human access; and
- (ii) control the contact current so that it has no effect on the human body.

(Maintenance of Insulation Performance)

Article 8 Electrical appliances and materials are to be made to maintain the insulation performance in consideration of internal and external actions to which they are likely to be exposed under normal use, and in accordance with the conditions of the place of use.

(Protection against Fire Hazards)

Article 9 Electrical appliances and materials are to incorporate measures to mitigate the risk of causing physical injury or property damage due to ignition, including adopting a configuration that prevents them from reaching ignition

temperature, and using flame-resistant components and materials.

(Prevention of Burns)

Article 10 Electrical appliances and materials are to incorporate designs and other measures to prevent burns, such as by ensuring that they will not reach a temperature that is likely to cause physical injury or their heat-generating parts will not be easily exposed under normal use.

(Prevention of Harm due to Mechanical Hazards)

Article 11 (1) Electrical appliances and materials are to incorporate appropriate designs and other measures to mitigate the risk of causing physical injury or property damage due to the overturning thereof resulting from their instability, human contact to the moving parts or sharp edges thereof or other reasons.

(2) Electrical appliances and materials are to incorporate designs to provide necessary strength and other measures to mitigate the risk of causing physical injury or property damage due to hazards caused by external mechanical actions that can normally take place.

(Prevention of Harm or Damage due to Chemical Hazards)

Article 12 Electrical appliances and materials are to be made to pose no risk of causing physical injury or property damage due to leaking or melting of chemical substances contained in them.

(Prevention of Harm due to Electromagnetic Waves Emitted from Electrical Appliances and Materials)

Article 13 Electrical appliances and materials are to be made to not externally emit electromagnetic waves that are likely to cause physical injury.

(Safety Designs Based on Method of Use)

Article 14 Electrical appliances and materials are to be designed to mitigate the risk of causing physical injury or property damage even in their normally expected unattended operation, and are to be labeled appropriately as may be necessary.

(Prevention of Harm due to Start, Restart and Stop of Operation)

Article 15 (1) Electrical appliances and materials are to be made to pose no risk of causing physical injury or property damage due to a sudden start of operation.

(2) Electrical appliances and materials are to be made to pose no risk of causing physical injury or property damage due to a restart of operation following the suspension or stop of operation.

(3) Electrical appliances and materials are to be made to pose no risk of causing physical injury or property damage due to a sudden stop of operation.

(Protective Coordination and Combination)

Article 16 Taking into account the power distribution systems to which they are connected and other electrical appliances and materials with which they are combined, electrical appliances and materials are to be made by setting the operating characteristics of the safety devices so that the safety devices will effectively operate in response to an abnormal electric current, and ensuring that the circuits will be able to withstand an abnormal electric current until the safety devices operate.

(Resistance to Electromagnetic Interference)

Article 17 Electrical appliances and materials are to be configured to prevent any disturbance to their safety functions from being caused by electric, magnetic or electromagnetic interference.

#### **Chapter IV Noise Level**

Article 18 Electrical appliances and materials are to be made to pose no risk of generating noise to a level that disturbs the functions of broadcast reception and telecommunications under normal use.

#### **Chapter V Labels**

(General Rule)

Article 19 Electrical appliances and materials are to be labeled with necessary safety information and instructions for use (excluding those required under the Household Goods Quality Labeling Act (Act No. 104 of 1962)), in visible places thereon and in a not easily removable manner.

(Labeling under Long-term Use Products Safety Inspection Labeling System)

Article 20 Labeling of products set forth in the following items is to be conducted as prescribed in the respective items beyond the provisions of the preceding Article:

- (i) electric room fans and ventilation fans (excluding those for industrial use or those that also function as electric dryers (limited to those with electric heating devices for bathroom use, and excluding electric hair dryers)): indicate the following matters in a visible place on the product body, in a legible and not easily removable manner:
  - (a) the year of manufacture;

- (b) the design-based standard period of use (meaning the design standard use period prescribed in Article 32-3, paragraph (1), item (i) of the Consumer Product Safety Act (Act No. 31 of 1973); the same applies hereinafter); and
  - (c) a note that the use of the product beyond its design-based standard period of use is likely to result in an accident such as ignition or injury due to wear and tear;
- (ii) electric air conditioners (excluding those for industrial use): indicate the following matters in a visible place on the product body, in a legible and not easily removable manner:
    - (a) the year of manufacture;
    - (b) the design-based standard period of use; and
    - (c) a note that the use of the product beyond its design-based standard period of use is likely to result in an accident such as ignition or injury due to aging degradation;
  - (iii) electric washing machines (excluding those for industrial use and those with drying devices) and electric spin extractors (limited to those integrated in electric washing machines, and excluding those for industrial use): indicate the following matters in a visible place on the product body, in a legible and not easily removable manner:
    - (a) the year of manufacture;
    - (b) the design-based standard period of use; and
    - (c) a note that the use of the product beyond its design-based standard period of use is likely to result in an accident such as ignition or injury due to wear and tear; and
  - (iv) television receivers (limited to those with cathode-ray tubes, and excluding those for industrial use): indicate the following matters in a visible place on the product body, in a legible and not easily removable manner:
    - (a) the year of manufacture;
    - (b) the design-based standard period of use; and
    - (c) a note that the use of the product beyond its design-based standard period of use is likely to result in an accident such as ignition or injury due to wear and tear.

### **Supplementary Provisions**

- (1) This Ministerial Order comes into effect as of January 1, 2014.
- (2) The prior Ministerial Order continues to govern technical standards for electrical appliances and materials manufactured or imported before this Ministerial Order comes into effect, notwithstanding the provisions amended by this Ministerial Order.