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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

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Domestic gas cooking appliances

家用燃气灶具

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1 Scope

China's mandatory national standard for domestic gas cooking appliances. A gas cooker is the only unvented combustion appliance most homes contain, burning fuel in the room the family occupies, which is what makes its specification a safety document rather than a performance one. Two failures dominate. Incomplete combustion produces carbon monoxide, which is odourless and kills at concentrations that produce no warning, so the standard limits the carbon monoxide in the combustion products under normal and adverse conditions. And an unlit or extinguished burner releases raw gas, which is why the flame supervision device that shuts off the gas when the flame goes out is required. Around these sit the requirements for the flame stability across the gas families and pressures found in China, the thermal efficiency, the surface temperatures, and the durability of the taps and hoses.

This standard specifies the terms and definitions, product classification, requirements, test methods, markings, packaging of domestic gas cooking appliances. This standard applies to domestic gas cooking appliances, that use town gas, AND domestic gas-electric combined stoves, that use town gas and electric energy, including.

- a) A gas stove, which has a single burner's nominal heat input of $\leq$
- b) Gas ovens and gas roasters, which have a nominal heat input of $\leq$
- c) Freestanding gas cookers and independent hotplate and grills, whose nominal heat input meets the requirements of
- d) Gas-fired rice cooker, which has a maximum rice volume for each stew ≤ 4 L AND a nominal heat input $\leq$
- e) Gas-electric combined stoves, whose nominal heat input meets the requirements of a), b), d), AND whose total rated input power of electricity is $\leq$
- f) The integration cooking appliance, whose nominal heat input meets the requirements of
- g) Domestic outdoor gas barbecues (hereinafter referred to as gas barbecues), which is gas-supplied by a liquefied petroleum gas cylinder, with a charge of not more than 15 kg, AND has a total heat input of not greater than 35 kW.

2 Normative references

The following documents are essential to the application of this document. For the dated documents, only the versions with the dates indicated are applicable to this document; for the undated documents, only the latest version (including all the amendments) is applicable

to this standard.

GB/T 191 Packaging - Pictorial marking for handling of goods

GB/T 1019-2008 General requirements for the package of household and similar electrical appliances

GB/T 1690-2010 Rubber, vulcanized or thermoplastic - Determination of the effect of liquids

GB/T 1740 Determination of resistance to heat and humidity of paint films

GB/T 1765 Method of producing of paint films for testing heat and humidity resistance, salt-fog resistance and accelerated weathering

GB/T 1771 Paints and varnishes - Determination of resistance to neutral salt spray (fog)

GB/T 3768-2017 Acoustics - Determination of sound power levels and sound energy levels of noise sources using sound pressure - Survey method using an enveloping measurement surface over a reflecting plane

3 Terms and definitions

The terms and definitions as defined in GB 4706.1 and GB 4706.22, as well as the following terms and definitions, apply to this document.

Note. The terminology of AC power cooking appliances corresponds to the appliance terms, which are established in GB 4706.1, for example, cooking appliances corresponding to appliances, class I cooking appliances corresponding to class I appliances, class II cooking appliances corresponding to class II appliances, class III cooking appliances corresponding to class III appliances, electric heating stoves correspond to electric heating appliances, electric cookers correspond to electric appliances, combined cookers correspond to combined appliances.

4.1 Types of gas cooking appliances

Note. Gas cooking appliances are hereinafter referred to as cooking appliances.

5.1 Basic design parameters

5.1.1 Refer to Table 1 for the nominal gas pressure in front of the stove.

5.1.2 Stoves using AC power supply. power supply conditions. single-phase rated voltage ≤ 250 V.

5.2 Performance

5.2.1 Air tightness The air tightness of stoves shall meet the following requirements.

a) From the gas inlet to the gas valve, at a pressure of

4.2 kPa, the gas leakage is $\leq$

0.07 L/h;

b) For the automatic control valve, at a pressure of

4.2 kPa, the gas leakage is $\leq$

0.55 L/h;

c) When using the 0-1 gas to ignite from the gas inlet to the burner's fire hole, there is no leakage.

5.2.2 Heat input The heat input of stoves shall meet.

5.2.3 Combustion conditions The Combustion conditions of stoves shall meet the requirements of Table 2.

5.2.4 Temperature rise The temperature rise shall not exceed the value, which is shown in Table 3.

5.2.5 Maximum pressure rise of gas cylinder The maximum pressure rise in the gas cylinder shall meet the requirements of Table 4.

5.2.6 Resistance to thermal shock

5.2.6.1 The oven door and the observation window glass of the gas barbecue shall not be cracked, due to thermal shock.

5.2.6.2 The resistance to thermal shock of the tempered glass of the stove surface shall meet the requirements of CJ/T 157-2017.

5.2.6.3 The resistance to thermal shock of ceramic panels shall meet the requirements of CJ/T 305-2009.

5.2.6.4 The panel of non-metallic materials shall not splash after being broken, due to thermal shock.

5.3.1 General requirements of structure

5.3.1.1 The parts and components of stoves shall be safe and durable. They shall not be damaged or deformed in normal operation.

5.3.1.2 The stoves shall have sufficient stability during normal use. There shall be no sliding or tipping.

5.3.1.3 When the overall structure of the stove is tilted 15° in any direction, it will not tip over; the parts will not fall off.

5.3.1.4 The burners of stoves (excluding products for outdoor use, such as gas barbecues)