



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

GB 1886.260-2016

National Food Safety Standard -- Food Additives -- Hesperidin

食品安全国家标准 食品添加剂 橙皮素

(English Translation)

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1 Scope

This standard applies to the hesperidin for raw materials of food additives hesperetin.

2.1 Chemical Name

5,7-dihydroxy-2- (3-hydroxy-4-methoxy - phenyl) - chroman-4-one Formula 2.2 C₁₆H₁₄O₆

2.4 Molecular Weight

302.28 (according to 2007 international relative atomic mass)

3.1 Sensory requirements

Sensory requirements shall comply with the requirements in Table 1.

Table 1 Sensory requirements

Project requires test methods Pale yellow or white color Status powder the sample was placed on a clean white paper, were visually observed GB vanilla aroma with a faint aroma oil flavor/T 14454.2

3.2 Physical and Chemical Indicators

Physical and chemical indicators should be consistent with the provisions of Table 2.

Table 2. Physical and chemical indicators

Item Index Test Method Hesperetin content, w /% ≥ 95 Appendix A Melting point/ $^{\circ}\text{C}$ 226 ~ 228 GB/T 14457.3 Appendix A Determination of Content of hesperetin A.1 Reagents and materials A.1.1 Acetonitrile. chromatographically pure.

100mL. The resulting solution was filtered with a 0.45μm membrane, the filtrate was set aside.

A.4.3 Determination

In reference A.3 chromatographic conditions, respectively, the reference solution and the sample solution is measured, the peak area recorded.

A.5 calculation results Hesperetin mass fraction levels w_1 , calculated according to formula (A.1).

$A_1 \times m_2 \times w_2$

$A_2 \times m_1 \times$

100% (A.1)

Where.

Peak area of the main peak in the chromatogram of the sample solution A_1 ---;

m_2 --- reference mass, in grams (g);

Mass fraction content w_2 of hesperetin --- reference in%;

Peak area of the main peak in the chromatogram of the reference solution A_2 ---;

M_1 --- sample mass, in grams (g).