



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

GB 1886.346-2021

National food safety standard - Food additives - Orange yellow

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1 Scope

This Standard is applicable to the food additive orange yellow, which is obtained through extraction by vegetable oil solvent and refining (for example, concentration)

with the peel of citrus rutaceae (Rutaceae, Citrus L.) as the raw material.

2.1 Molecular Formula

Citrus: C₄₀H₅₆O

2.2 Structural Formula

Citrus:

3.1 Sensory Requirements

The sensory requirements shall comply with the requirements of Table 1.

Table 1 -- Sensory Requirements

Appendix A Inspection Method

WARNING: some reagents used in the inspection method of this Standard are toxic or corrosive. During operation, appropriate safety and protective measures shall be taken.

A.1 General Rules When other requirements are not specified, the reagents and water used in this Standard refer to analytically pure reagents and Grade-3 water specified in GB/T 6682.

When other requirements are not specified, the standard solutions, preparations and products used in tests shall be prepared in accordance with the stipulations of GB/T 601, GB/T 602 and GB/T 603. When it is not specified which solvent is used for preparation, the solutions used in tests refer to aqueous solutions.

A.2 Identification Test A.2.1 Reagents and materials A.2.1.1 Ether.

A.2.1.2 N-hexane.

A.2.1.3 Toluene.

A.2.1.4 Petroleum ether, with a boiling range of 30 °C ~ 60 °C.

A.2.1.5 Ethanol.

A.2.1.6 Acetone.

A.2.1.7 Sodium nitrite solution: weigh-take 5 g of sodium nitrite; add water to dissolve it and reach a constant volume of 100 mL.

A.2.1.8 Sulfuric acid solution: draw 1.5 mL of concentrated sulfuric acid; slowly pour it into 80 mL water; add water to reach a constant volume of 100 mL.

A.2.1.9 Developing solvent: N-hexane : acetone = 7 : 3.

A.2.2 Instruments and equipment A.2.2.1 Electronic balance, with an accuracy of 0.01 g.

A.2.2.2 Spectrophotometer.