



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

GB 1886.319-2021

**National food safety standard - Food additives - Hippophae
rhamnoides yellow**

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1 Scope

This Standard is applicable to the food additive of hippophae rhamnoides yellow made from the fruit and pomace of the plant sea buckthorn (*Hippophae rhamnoides* L.), extracted by n-hexane or ethanol, or extracted with supercritical carbon dioxide, and then obtained through refining and other processes.

2.1 Sensory requirements

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

Table 1 Sensory Requirements

2.2 Physical and chemical indicators

The physical and chemical indicators shall comply with the provisions of Table 2.

Appendix A Test Methods

A.1 General provisions When there are no other requirements, the reagents and water used in this Standard refer to analytical reagents and Class-III water that complies with the provisions of

GB/T 6682. When there are no other requirements, the standard solutions, impurity standard solutions, preparations and products used in the test shall all be prepared in accordance with the provisions of GB/T 601, GB/T 602, and GB/T 603. The solution used in the test refers to the aqueous solution when the solvent is not specified.

A.2 Identification test A.2.1 Solubility It is not easily soluble in water; but easily soluble in organic solvents such as n-hexane, petroleum ether, acetone, etc. The solution shall be yellow.

A.2.2 Colour reaction A.2.2.1 Reagents and materials A.2.2.1.1 Phosphomolybdic acid solution: Take 5.0g of phosphomolybdic acid; add absolute ethanol to make the constant volume to 100mL; and get it.

A.2.2.1.2 Sulfuric acid: 98%.

A.2.2.1.3 Bromophenol blue solution: Take 1.0g of bromophenol blue; add absolute ethanol to make the constant volume to 100mL; and get it.

A.2.2.1.4 Antimony trichloride solution: a trichloromethane solution saturated with antimony trichloride.

A.2.2.2 Measurement procedures Dip the silica gel G thin-layer TLC plate in the he yellow pigment solution. The developing solvent can be 95% ethanol or absolute ethanol. After taking it out, it shall air dry; and the TLC plate shall be yellow. Drop the above-mentioned reagent solution on this thin-layer plate and observe the colour development.

Blank test: Take a blank silica gel G thin-layer TLC plate immersed in the same developing solvent; titrate the corresponding colour reagents; and observe the colour development.