



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

GB 1886.49-2016

Replacing GB 22558-2008

Food additive -- Erythorbic acid

食品安全国家标准 食品添加剂 D-异抗坏血酸

(English Translation)

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Table of Contents

- 1 Scope
- 2 Chemical name, molecular formula and relative molecular mass
 - 2.1 Chemical Name
 - 2.3 Relative molecular mass
- 3 Technical requirements
 - 3.1 Sensory requirements
 - 3.2 Physical and Chemical Indicators

1 Scope

This standard applies to methanol and carbon monoxide as raw materials by low pressure hydroformylation production of food additives glacial acetic acid.

2.1 Chemical Name

Glacial acetic acid

Formula 2.2

C₂H₄O₂

2.3 Relative molecular mass

60.05 (according to 2007 international relative atomic mass)

3.1 Sensory requirements

Sensory requirements shall comply with the requirements of Table 1.

Table 1 Sensory requirements

Project requires test methods Colorless, transparent color Liquid state There is a strong smell pungent vinegar Take the right amount of sample is placed in a clean, dry transparent glass tube , Under natural light, observe its color and status, and olfactory its taste

3.2 Physical and Chemical Indicators

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

GB 1886.85-2016

Table 2. Physical and chemical indicators

Item Index Test Method Glacial acetic acid content, w /% ≥ 99.8 GB 1886.10 Potassium permanganate via pilot Appendix A A.3 Evaporation residue, w /% ≤ 0.005 GB 1886.10 Crystallization point/ $^{\circ}\text{C}$ ≥ 16.2 GB/T 7533 Heavy metals (Pb)/(mg/kg) ≤ 2 GB 5009.74 Arsenic (As)/(mg/kg) ≤ 1.0 GB 5009.76 GB 1886.85-2016 Appendix A Testing method A.1 Warning Reagents The standard test methods used for toxic or corrosive, care should be taken. As splashed on the skin should stand that is rinsed with water, severe cases should be treated immediately. When using the virulent, should be strictly in accordance with the relevant provisions of the management; should be used to avoid inhalation or skin Skin contact should be necessary in a fume hood.

A.2 General Provisions this standard reagents and water in the absence of other specified requirements, refer to the three water analytical reagent and GB/T 6682 regulations.

Standard solutions used in the tests, the determination of impurities standard solution, preparations and products, did not indicate when the other requirements according to GB/T 601, GB/T 602, GB/T 603 provisions of preparation. Solution was used in the tests did not indicate what is formulated with solvent, it refers to an aqueous solution.

A.3 potassium permanganate test A.3.1 Method summary Glacial acetic acid and potassium permanganate reducing substance, and then in a predetermined period of time, appears in pink solution should disappear.

A.3.2 Reagents and materials Potassium permanganate solution. 3.1g/L.

A.3.3 Analysis step

Volume of 2mL sample and put a stopper colorimetric tube. 10mL water was added to dissolve at $20\text{ }^{\circ}\text{C} \pm 1\text{ }^{\circ}\text{C}$ water bath was added 0.1mL high Potassium permanganate solution, shake, pink solution should disappear within 180min is through testing.