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

GB 30611-2014

**National Food Safety Standard -- Food Additives -- Isopropyl
Alcohol**

食品添加剂 异丙醇

(English Translation)

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1 Scope

This standard applies to propylene or acetone as raw materials prepared by the food additive isopropyl alcohol.

2.1 Molecular formula

C₃H₈O.

2.3 Relative molecular mass

60.10 (according to 2011 international relative atomic mass).

3.1 Sensory requirements

Sensory requirements shall comply with the requirements of Table 1.

Table 1 sensory requirements

The project requires a test method Color and colorless State transparent liquid Take appropriate sample, placed in a clean, dry colorimetric tube, in the self Under the light, the visual observation of its color and state

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 Isopropyl alcohol content (mass fraction) /% ≥ 99.5 GB/T 7814-2008 4.4 Other alcohol, ether and volatile impurities (mass fraction) /% $\leq$ the content

of single volatile impurities (mass fraction) /% ≤ 0.5 0.1 GB/T 7814-2008 4.4 Moisture (mass fraction) /% ≤ 0.2 GB Acidity (in acetic acid) (mass fraction) /% ≤ 0.002 Appendix A A.4 Boiling range/ $^{\circ}\text{C}$ 1.0 (including 82.3) GB/T 7534 Evaporation residue/(mg/100mL) ≤ 2 GB/T 6324.2 Lead (Pb)/(mg/kg) ≤ 1 GB 5009.12 Appendix A Testing method A.1 Warning Some of the test procedures specified in the test method may result in a hazardous situation. Operators should take appropriate safety and protective measures.

A.2 General provisions Unless otherwise stated, only the reagents identified as analytical reagents and the tertiary water specified in GB/T 6682 were used in the analysis. Test method Standard solutions, preparations and articles for the determination of impurities, standard solutions for impurities, are marked with GB/T 601, GB/T 602 when no other requirements are specified and GB/T 603; the solution used is, unless otherwise stated, an aqueous solution.

A.3 Identification test A.3.1 Solubility Easily soluble in water, ethanol, ether and other organic solvents.

A.3.2 Refractive index According to the provisions of GB/T 614 determination. Refractive index n_D^{20} should be. $1.377 \sim 1.380$.

A.3.3 Relative density According to the provisions of GB/T 5009.2 determination. The relative density d_{20}^{20} should be $0.784 \sim 0.788$.

A.4 Determination of acidity A.4.1 Reagents and materials A.4.1.1 Sodium hydroxide standard titration solution. $c(\text{NaOH}) = 0.01 \text{ mol/L}$.

A.4.1.2 phenolphthalein indicator solution. 10g/L .

A.4.2 Analysis steps Add 100 drops of water to 100mL of water to the phenolphthalein indicator solution, titrate with sodium hydroxide titration solution until pink has just appeared and keep for 30s Change, then add 50mL (about 39g) sample, mix. And then titration with sodium hydroxide titration solution to restore the pink, sodium hydroxide standard Titration solution consumption should not be greater than 0.7mL. Equivalent to acidity of not more than 0.002%.