Specifications Standard for Gum Arabic as Food Raw Material

Article 1
This Standard is prescribed in accordance with the provisions of Article 17 of the Act Governing Food Safety and Sanitation.

Article 2
Gum Arabic (Gum arabic；Acacia gum) as food raw material shall comply with the following specifications:

1. Definition: Gum arabic is a dried exudate obtained from the stems and branches of strains of *Acacia senegal* (L.) Willdenow or closely related species of Acacia (family *Leguminosae*). It consists mainly of high-molecular weight polysaccharides and their calcium, magnesium and potassium salts, which on hydrolysis yield arabinose, galactose, rhamnose and glucuronic acid.
2. Description and Identification: The unground product occurs as white to orange-brown, spheroidal tears of varying size or in angular fragments. Gum arabic is also available commercially in the form of white to yellowish-white flakes, granules, powder, roller dried, or spray-dried material. One gram dissolves in 2 mL of water, forming a solution that flows readily and is acid to litmus, insoluble in ethanol.
3. Purity:
   (1)Loss on drying: Not more than 15% (105°, 5 h) for granular and not more than 10% (105°, 4 h) for spray dried material.
   (2)Total ash: Not more than 4%.
   (3)Acid-insoluble ash : Not more than 0.5%.
   (4)Acid-insoluble matter : Not more than 1%.
   (5)Starch or dextrin: Boil a 1 in 50 solution of the sample, cool and add a few drops of Iodine T.S. No bluish or reddish colour should be produced.
   (6)Tannin-bearing gums: To 10 mL of a 1 in 50 solution of the sample, add about 0.1 mL of ferric chloride TS. No blackish colouration or blackish precipitate should be formed.
   (7)Microbiological criteria:

Salmonella spp.: Negative.

E. coli: Negative.

(8)Arsenic: Not more than 3 mg/kg.

(9)Lead: Not more than 2 mg/kg.

(10)Mercury: Not more than 1 mg/kg.

(11)Cadmium: Not more than 1 mg/kg.

Article 3

This Standard shall be implemented from the date of promulgation.