

Voluntary - Public

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## **Korea - Republic of**

**Post:** Seoul

### **SPS 329 - A Proposed Revision of the Food Additive Code**

**Report Categories:**

FAIRS Subject Report

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**Report Highlights:**

The Korea Food & Drug Administration (KFDA) announced a draft revision of the Food Additive Code on June 9, 2009, which was notified to the WTO under SPS 329. The revision was proposed in order to ensure the safety management of food additives by adding new specifications for contaminants in natural additives. International comments are due by August 8, 2009.

**General Information:**

**Background:** The Korea Food & Drug Administration (KFDA) announced a draft revision of the Food Additive Code on June 9, 2009, which was notified to the WTO under SPS 329. The revision was proposed in order to ensure the safety management of food additives by adding new specifications for contaminants such as heavy metals and microorganisms in natural additives. Most of changes made in these proposed regulations are related to specifications for food additives. The contaminant levels allowed in the proposed standards for the food additives appear to keep the final

food product below normal contaminant standards.

### **Summary of Proposed Changes**

- Specifications for heavy metals are strengthened or established in the following 30 items: Microcrystalline cellulose, guar gum, lecithin, locust bean gum, lysozyme, tagetes extract, beeswax, bentonite, powdered cellulose, beet red, xanthan gum, shellac, cyclodextrin, arabic gum, annatto extract, alginic acid, liquid paraffin, invertase, gellan gum, carnauba wax, caramel color, karaya gum, curdlan, cochineal extract, tara gum, tannic acid, *d*-tocopherol concentrate (mixed), *d*-*a*-tocopherol concentrate, tragacanth gum, oleoresin paprika
- Specifications for residual solvents are established in the following 5 items: Guar gum, locust bean gum, xanthan gum, cyclodextrin, tannic acid.
- Microbiological criteria are established for the following 12 items: Guar gum, locust bean gum, lysozyme, bentonite, xanthan gum, cyclodextrin, alginic acid, invertase, gellan gum, karaya gum, curdlan, tragacanth gum.
- Specifications for contents of cyclodextrin and *d*-tocopherol concentrate (mixed) are revised.
- Standards for the manufacture of genetically modified food additives are established.
- The definitions of hypochlorous acid water, cyclodextrin and *d*-tocopherol concentrate (mixed) are revised.
- The standards for use of smoke flavor are revised.

The full text of the proposed revision is below.

### **Food Additive Code**

#### **I. Manufacturing Standards**

##### Food additives in general

Genetically modified food additives: Food additives that are manufactured using microorganisms obtained through recombinant gene technology shall be approved following “Regulations for Safety Evaluation of Recombinant Food” (KFDA Notice) in accordance with Article 15 of the Food Sanitation Act and shall meet the standards and specifications set for individual items.

#### **III. Standards and Specifications for Individual Items**

##### **B. Natural Additives**

3. Cellulose. Microcrystalline, Cellulose Gel

Specifications:

- 2) Lead: 2ppm or below
- 3) Cadmium: 1 ppm or below
- 4) Mercury: 1 ppm or below

5. Guar Gum

Specifications:

- 2) Lead: 2ppm or below
- 3) Cadmium: 1 ppm or below
- 4) Mercury: 1 ppm or below
- 5) No change
- 6) Iropropyl alcohol: 1% or below
- 7) Borates: it shall not be red brown color
- 8) Bacteria count: 5,000/1g or below
- 9) E. Coli: negative
- 10) Salmonella: negative
- 11) Fungal count: 500/1g or below

16. Lecithin

Specifications:

- 2) Lead: 2ppm or below
- 3) Mercury: 1 ppm or below

18. Locust Bean Gum, Carob Bean Gum

Specifications:

- 2) Lead: 2ppm or below
- 3) Cadmium: 1 ppm or below
- 4) Mercury: 1 ppm or below
- 5) No change
- 6) Iropropyl alcohol: 1% or below
- 7) Bacteria count: 5,000/1g or below
- 8) E. Coli: negative
- 9) Salmonella: negative
- 10) Fungal count: 500/1g or below

19. Lysozyme

Specifications:

- 2) Arsenic: 1.3 ppm or below
- 3) Lead: 2ppm or below
- 4) Mercury: 1 ppm or below
- 5) No change
- 6) Nitrogen: 16.8 – 17.8% or below
- 7) Bacteria count: 50,000/1g or below
- 8) E. Coli: negative
- 9) Salmonella: negative

- 10) Staphylococcus aureus: negative
- 11) Moisture: 6.0% or below
- 12) Residue on ignition: 1.5% or below

22. Tagetes Extract

Specifications:

- 2) Lead: 2ppm or below

23. Beeswax

Specifications:

- 2) Lead: 2ppm or below
- 3) Mercury: 1ppm or below
- 10) Saponification value: 87-104
- 11) Peroxide value: 5 or below
- 12) Ceresin, paraffin, other waxes: no precipitation before reaching 65C
- 13) Glycerol or other polyol: 0.5% or below as glycerol

27. Bentonite

Specifications:

- 3) Lead: 20 ppm or below
- 4) Bacterial count: 1,000/1g
- 5) E. Coli: negative

28. Cellulose, powdered

Specifications:

- 2) Lead: 2ppm or below
- 3) Cadmium: 1 ppm or below
- 4) Mercury: 1 ppm or below

30. Beet red

Specifications:

- 2) Lead: 2ppm or below
- 3) Cadmium: 1 ppm or below
- 4) Mercury: 1 ppm or below
- 5) NO<sub>3</sub>: 2% or below as NO<sub>3</sub>

32. Xanthan gum

Specifications:

- 2) Lead: 2ppm or below
- 3) Iropropyl alcohol: 0.05% or below
- 5) Nitrogen: 1.5% or below
- 6) Bacteria count: 5,000/1g or below
- 7) E. Coli: negative
- 8) Salmonella: negative
- 9) Fungal count: 500/1g or below

35. Shellac

Specifications:

2) Lead: 2ppm or below

38. Cyclodextrin

Specifications:

5) Lead: 1ppm or below

6) Residual solvent: as for b-cyclodextrin, the amount of toluene and trichloroethylene shall be 1ppm or below respectively.

40. Arabic gum, Acasia

Specifications:

2) Lead: 2ppm or below

3) Cadmium: 1 ppm or below

4) Mercury: 1 ppm or below

9) E. Coli: negative

10) Salmonella: negative

43. Annatto Extract

Specifications:

2) Lead: 2ppm or below

3) Cadmium: 1 ppm or below

4) Mercury: 1 ppm or below

44. Alginic Acid

Specifications:

2) Lead: 5ppm or below

3) Cadmium: 1 ppm or below

4) Mercury: 1 ppm or below

5) No change

6) Liquid: as for suspension (3→100), it shall be pH 2.0 - 3.5

7) Bacteria count: 5,000/1g or below

8) E. Coli: negative

9) Salmonella: negative

10) Fungal count: 500/1g or below

47. Liquid Paraffin

Specifications

2) Lead: 1ppm or below

49. Invertase

Specifications:

2) Lead: 5ppm or below

3) Cadmium: 0.5 ppm or below

6) Bacteria count: 50,000/1g or below

7) E. Coli: negative

52. Gellan gum

Specifications:

- 2) Lead: 2ppm or below
- 3) Cadmium: 1 ppm or below
- 4) Mercury: 1 ppm or below
- 6) Nitrogen: 3% or below
- 7) Bacteria count: 10,000/1g or below
- 9) E. Coli: negative
- 10) Salmonella: negative
- 11) Fungal count: 400/1g or below

59. Carnauba Wax

Specifications:

- 2) Lead: 2ppm or below
- 3) Mercury: 1 ppm or below

61. Caramel Color

Specifications:

- 2) Lead: 2ppm or below
- 3) Cadmium: 1 ppm or below
- 10) Total sulfur: 3.5% or below

62. Karaya Gum

Specifications:

- 2) Lead: 2ppm or below
- 3) Cadmium: 1 ppm or below
- 4) Mercury: 1 ppm or below
- 9) Volatile acidity: 0.42ml or above
- 10) E. Coli: negative
- 11) Salmonella: negative

66. Curdlan

Specifications:

- 2) Lead: 0.5ppm or below
- 4) Nitrogen: 0.3% or below
- 5) Bacteria count: 1,000/1g or below
- 6) E. Coli: negative
- 7) Residue on ignition: 6% or below

67. Cochineal extract

Specifications:

- 2) Lead: 2ppm or below
- 3) Cadmium: 1 ppm or below
- 4) Mercury: 1 ppm or below
- 5) Protein: 2.2% or below

71. Tara gum

Specifications:

- 2) Lead: 2ppm or below
- 3) Cadmium: 1 ppm or below
- 4) Mercury: 1 ppm or below

74. Tannic Acid

Specifications:

- 2) Lead: 2ppm or below
- 3) Residual solvent: acetone and/or acetic ethyl shall be 25 ppm or below

76. d-Tocopherol Concentrate, Mixed

Specifications:

- 2) Lead: 2ppm or below
- 3) Arsenic: 4 ppm or below
- 4) Mercury: 1 ppm or below

77. d- $\alpha$ -Tocopherol Concentrate

Specifications:

- 2) Lead: 2ppm or below

78. Tragacanth Gum

Specifications:

- 2) Lead: 2ppm or below
- 3) Cadmium: 1 ppm or below
- 4) Mercury: 1 ppm or below
- 5) E. Coli: negative
- 6) Salmonella: negative

80. Oleoresin Paprika

Specifications:

- 2) Lead: 2ppm or below
- 3) Cadmium: 1 ppm or below
- 4) Mercury: 1 ppm or below

160. Smoke Flavours

Usage standards:

Smoke flavours should be used in the following items only for flavoring purpose.

- Edible processed meat products
- Processed fishery meat products
- Sauces
- Confectionaries (limited to snacks)

**Enforcement Date:** The enforcement date of this proposed revision has not yet been determined.

**Comments:** According to the WTO notification SPS 329, international comments are due by August 8, 2009.