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**LIGHT INDUSTRY STANDARD OF THE
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**Coloring food ingredients for food industry
(English Translation)**

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1 Scope

This document specifies the basic and technical requirements for coloring food ingredients used in the food industry. It describes the corresponding test methods, and stipulates the inspection rules, judgment rules, labeling, packaging, storage, and transportation procedures. It also provides a classification for convenient technical regulations and defines relevant terminology.

This document applies to the production, inspection, and sale of coloring food ingredients for the food industry.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

GB 2760, National Food Safety Standard - Food additives - Usage Standards

GB 5009.2, National food safety standard - Determination of relative density of food

GB 5009.3, National food safety standard - Determination of Moisture Content in

Foods

GB 7101, National food safety standard - Drinks

GB 7718, National food safety standard - General Standard for the Labeling of
Prepackaged Foods

GB/T 10468, Fruit and vegetable products. Determination of pH

GB 14881, National food safety standard - General hygienic regulation for food production

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

coloring food ingredients

Liquid or solid food ingredients made from one or more fruits, vegetables or other edible plants or algae, with or without added ingredients, through a certain physical process, which can provide color to other foods.

4.1 Liquid coloring food ingredients

Products that are water-soluble or oil-dispersible.

4.2 Solid coloring food ingredients

Products in the form of powder, crystals, etc.

5.1 Requirements for raw and auxiliary materials

5.1.1

Raw and auxiliary materials shall comply with relevant national food safety standards, product standards, and the provisions of announcements issued by the State Council's agricultural and health administrative departments.

5.1.2

Raw materials shall have natural coloring properties and be able to provide color to other foods.

5.1.3

The auxiliary ingredients may include sugar, syrup (invert sugar syrup), water, edible vegetable oil, maltodextrin, starch, physically modified starch, etc. (including food additives).

5.2 Requirements for production and processing

5.2.1

Process control shall comply with the provisions of GB 14881.

5.2.2

It shall be able to retain the basic characteristics and nutritional features of the raw materials, such as their composition, taste, flavor, etc., to the greatest extent possible.

5.2.3

Physical methods shall be used for production and processing. One or more of the following methods may be used. crushing, grinding, pressing, soaking, heating, filtering, concentrating, drying, etc.

5.2.4 Processes that separate coloring components or methods that use organic solvents

to selectively extract coloring components shall not be adopted.

6.1 Sensory requirements

6.5.1 The use of food additives shall comply with the provisions of the corresponding food categories in GB 2760.

6.5.2 Ingredients shall not contain coloring agents.

7.1 Batching

Products made from the same batch of raw materials, the same ingredients, the same shift, the same variety, and the same production line constitute a batch.

7.2.1 Liquid products

7.2.1.1

For liquid products individually packaged of 1000 mL or less, use the smallest original retail package from the same batch.

7.2.1.2

For liquid products in individual packaging larger than 1000 mL, samples can be collected from the individual packages. Alternatively, the liquid can be shaken or stirred with a sterile swab before sampling. Collect an appropriate amount of sample after thorough mixing.

7.2.2.1 For solid products individually packaged of 1000g or less, use the smallest

original retail package from the same batch.

7.2.2.2 For solid products individually packaged greater than 1000 g, samples can be collected from the individual packages. Alternatively, a sterile sampler can be used to collect appropriate amounts of samples from several different parts of the same package and place them into the same sterile sampling container.

7.3.1 Each batch of products undergoes inspection according to the exit-factory

inspection items before leaving the factory. Only products that pass the inspection can be released from the factory.

7.3.2 The exit-factory inspection items include sensory requirements, soluble solids, moisture, pH and relative density.

7.4 Type inspection

During normal production, type inspection shall be conducted at least every 6 months.

Type inspection includes all items specified in this document. Type inspection shall also be conducted in any of the following circumstances.

- When the product is finalized;
- When changes in raw material sources or replacement of major equipment may affect product quality;
- When the results of the exit-factory inspection differ significantly from the previous type inspection;
- When production resumes after a shutdown of more than six months;
- When the national quality supervision agency requires random inspections in accordance with relevant regulations.

8 Inspection rules

8.1

If all the inspected items are qualified, the inspection result is deemed qualified.

8.2

If any sensory or physicochemical requirements are not met, the sampling may be doubled for reinspection. If the reinspection is passed, the batch of products is deemed qualified. If any non-compliant items remain, the batch of products is deemed unqualified.

8.3

Microbiological indicators shall not be reinspected.