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

SN/T 1961.7-2013

**Detection of allergen components in food for export. Part 7:
Real time PCR method for detecting carrot components
(English Translation)**

Issued on: January 1, 1970

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Foreword

SN/T 1961 "export of food allergens detection" is divided into 19 parts.

- Part 1. enzyme-linked immunosorbent assay peanut ingredients;
- Part 2. real-time PCR method for detecting peanut ingredients;
- Part 3. enzyme-linked immunosorbent assay buckwheat protein component;
- Part 4. real-time PCR method for detection of cashew component;
- Part 5. real-time PCR method to detect pistachios ingredients;
- Part 6. real-time PCR method to detect walnut ingredients;
- Part 7. real-time PCR method to detect carrot ingredient;
- Part 8. real-time PCR method for detecting hazelnut ingredients;
- Part 9. real-time PCR method for detection of almond ingredients;
- Part 10. real-time PCR method to detect shrimp/crab ingredients;
- Part 11. real-time PCR method to detect gluten ingredients;
- Part 12. real-time PCR method for detection of sesame ingredients;
- Part 13. real-time PCR method to detect wheat component;
- Part 14. real-time PCR method to detect fish ingredients;
- Part 15. real-time PCR method for detection of celery ingredients;
- Part 16. real-time PCR method for detection of mustard ingredients;
- Part 17. real-time PCR method for detection of lupine ingredient;
- Part 18. real-time PCR method for detecting buckwheat ingredients;

--- Part 19. real-time PCR method to detect soy ingredients.

This section SN/T 1961 Part 7.

This section drafted in accordance with GB/T 1.1-2009 given rules.

Please note that some of the content of this document may involve patents. Release mechanism of the present document does not assume responsibility for the identification of these patents.

This section proposed and managed by the National Certification and Accreditation Administration Committee.

This section drafted by. China Inspection and Quarantine Science Research Institute, People's Republic of China Shandong CIQ.

1 Scope

SN/T 1961 provisions of this part of the food allergen ingredient carrot real-time PCR detection method.

This section allergen carrot ingredient for food and raw materials in the qualitative detection.

This part of the minimum detection limit (LOD) of 0.01% (mass fraction).

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

Laboratory use specifications and test methods GB/T 6682 Analysis GB/T 27403 laboratory quality control of food molecular biology standardized testing

3 Terms and Definitions

The following terms and definitions apply to this document.

Allergen alergen

Also known as allergens or allergens, can cause allergic reactions refers to an antigen.

Carrot

Also known as the carrot, it is Umbelliferae Daucus biennial herb, fleshy root eaten as a vegetable.

Real-time fluorescence PCR realtimefluorescentPCR it means adding a fluorophore in a

polymerase chain reaction system, real-time monitoring of the accumulation of fluorescence signal of the PCR process.

Ct values cyclethreshold when the number of cycles of each reaction tube fluorescent signal reaches the set value of the field experienced.

4 Method summary

The samples were milled to extract DNA, DNA as a template, using the carrot antifreeze protein gene-specific primers and probes to detect Real-time PCR amplification, according to the Ct value, the existence of the carrot allergen component in the sample is determined.

5 Kits and materials

Unless otherwise specified, reagents were analytical grade or biochemical reagents. Test water should comply with GB/T 6682 in a water specifications. All test