

CCS X04



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

GB/T 22958-2008

**Determination of canthaxanthin residues in fugu, eel and baked
eel - HPLC-UV method**

河豚鱼、鳗鱼和烤鳗中角黄素残留量的测定 液相色谱-紫外检测法

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Foreword

This standard Annex A, Annex B, Annex C is informative appendix. This standard is proposed and managed by the State Administration of Quality Supervision, Inspection and Quarantine. This standard was drafted. Qinhuangdao People's Republic of China Entry-Exit Inspection and Quarantine Qinghai People's Republic of China Exit Inspection and Quarantine Bureau and the People's Republic of China, Fujian. The main drafters of this standard. thin Hyperion, star jade show, I Contier, Jia light group, Caoyan Zhong, Luo Lili, Jia Hongwei, Pang Guofang. Puffer fish, eels and eel canthaxanthin Determination of residues LC - UV detection method

1 Scope

GB/T 22958-2008 is the Chinese national standard on determination of canthaxanthin residues in fugu, eel and baked eel - hplc-uv method. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 31 December 2008 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 May 2009. Classification: ICS (ICS) , CCS X04. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the puffer fish, eels and eel canthaxanthin (canthaxanthin) residues LC - UV detection method and liquid Chromatography - tandem mass spectrometry confirmed methods. This standard applies to puffer fish, eels and eel canthaxanthin residues measured and confirmed. The detection limit of this method is 0.05mg/kg.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including

errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 6379.1 measurement methods and results of Accuracy (trueness and precision) - Part 1. General principles and definitions (GB/T 6379.1-2004, ISO 5725-1.1994, IDT)

GB/T 6379.2 measurement methods and results of Accuracy (trueness and precision) - Part 2. Determine the standard measurement method to repeat Of the basic methods of reproduction (GB/T 6379.2-2004, ISO 5725-2.1994, IDT)

GB/T 6682 analytical laboratory use specifications and test methods (GB/T 6682-2008, ISO 3696. 1987, MOD) Principle

3 Canthaxanthin in the sample was extracted with acetonitrile, defatted with hexane purified by high performance liquid chromatography - ultraviolet detection, external standard. High performance liquid chromatography Spectrum - tandem mass spectrometry confirmed.

4 Reagents and materials

Unless otherwise indicated, the reagents used were of analytical grade.

4.1 Water. GB/T 6682, level.

4.2 acetonitrile. chromatography.

4.3 hexane. chromatographically pure.

4.4 n-hexane saturated acetonitrile. (4.3) in a small amount of acetonitrile (4.2) was added n-hexane and mix thoroughly. After resting stratification, the upper layer being drawn Hexane.

4.5 formic acid. pure class distinctions.

4.6 anhydrous sodium sulfate. before scorching 4h at 650 °C, placed after the dryer to cool reserve.

4.7 Coke sexual gallic acid. 4.8 0.1% formic acid. Pipette 1mL acid (4.5) with water volume 1L. Day of preparation.

4.9 Canthaxanthin standard substance (CAS. 514-78-3). purity $\geq 95\%$.

4.10 standard stock solution. Weigh accurately canthaxanthin standard 5.0mg (accurate to 0.1mg), dissolve with acetonitrile (4.2) and transferred to 50mL brown volumetric flask and dilute to the mark. The concentration of 100 μ g/mL. Stock solution stored at -18 °C freezer.

4.11 intermediate standard solution. lessons 1.00mL standard stock solution (4.10) and transferred to 10mL brown volumetric flask with acetonitrile to volume, the