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GB 5009.17-2014

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Forward

This standard replaces GB/T 5009.17-2003 “Determination of total mercury and organic-mercury in foods”.

Compared with GB/T 5009.17-2003, the major changes of this standard are as follows:

- The name of this standard has been revised to “National food safety standard Determination of total mercury and organic-mercury in foods”.
- The dithizone colorimetry in determination of total mercury and gas chromatography, cold vapor atomic absorption spectrometry in determination of organic-mercury have been deleted.
- The liquid chromatography – atomic fluorescence spectrometry (LC-AFS) for determination of methyl mercury has been added.

Determination of Total Mercury and Organic-mercury in Foods

1 Scope

Part I of this standard specifies the method for determination of total mercury in foods.

Part I of this standard applies to the determination of total mercury in foods.

Part II of this standard specifies the liquid chromatography – atomic fluorescence spectrometry (LC-AFS) for determination of methyl mercury content in foods.

Part II of this standard applies to the determination of methyl mercury content in foods.

Part I Determination of total mercury in foods

Method I Atomic fluorescence spectrometry

2 Principle

After the test sample is digested with acid by heating, the mercury in the test sample is reduced to mercury atoms by potassium borohydride or sodium borohydride in acidic medium, the mercury atoms are taken into an atomizer by

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