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

SN/T 3008-2011

**ation of cadmium content in plastics and plastics products for
import and export. Wet decomposition method**

进出口塑料及塑料制品中镉含量的测定 湿法消解法

(English Translation)

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Foreword

This revised standard adopts BSEN1122:2001 "Plastics - Determination of cadmium content in wet digestion" (in English).

This standard is prepared according to GB/T 1.1-2009 requirements.

This standard BSEN1122:2001 technical differences and for the following reasons.

The BSEN1122:2001 reference standard ISO 3856-4. Standard 1984 (GB/T 9758.4-1988) Chapter 3 predetermined reference Media --- hydrochloric acid solution (0.07mol/L) to sulfuric acid (1.8mol/L), due to the sensitivity of cadmium in both media have significant differences, should be changed and matching with the sample solution of sulfuric acid (1.8mol/L).

For ease of use, this standard also made the following editorial changes.

--- With a decimal point instead of a comma as the decimal point, "";

--- The BSEN1122:2001 standard name

"Plastics-Determinationofcadmium-Wetdecompositionmethod (Plastics Determination of cadmium content wet digestion) "was changed to" import and export of plastic and plastic products - Determination of cadmium content in the wet Digestion (Determinationofcadmiumcontentinplasticsandplasticsproductsforimportand export-Wetdecompositionmethod) ", a move to adapt to the inspection and quarantine industry standard name standardization Requirements;

--- Remove BSEN1122:2001 standard preface;

--- The BSEN1122:2001 Chapter 4, "agent" in the specification of sulfuric acid, nitric acid and hydrogen peroxide, the use of chemical analysis methods Common mode standard representation;

--- The BSEN1122. formula 2001 Chapter 7, "results" in the re-arranged to facilitate understanding;

--- The BSEN1122:2001 Chapter 8 "precision" of the content has been reclassified to conform to the requirements of the standard to write;

--- Remove BSEN1122. Chapter 9, "Test Report" 2001, because of its content suited to the inspection and quarantine provisions industry standard Requirements.

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

This standard was drafted. People's Republic of China Hunan Exit Inspection and Quarantine.

1 Scope

This standard specifies the method for determination of the import and export of plastic and plastic products - Determination of cadmium content in wet digestion.

This standard applies to the determination of fluorine plastic other than plastic and plastic products cadmium content was measured in the range of 10mg/kg ~ 3000mg/kg.

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.

GB/T 6682 analytical laboratory use specifications and test methods (GB/T 6682-2008, ISO 3696. 1987, MOD) Determination of GB/T 9758.4-1988 Paints and varnishes "soluble" metal content - Part 4. Determination of cadmium content original flame Absorption spectrometric method and polarographic method (ISO 3856-4. 1984, IDT) Principle 3 After wet digestion sample, the sample was introduced into flame atomic absorption spectrophotometer atomization occurs, and measured at a wavelength at 228.8nm Absorbance.

4 Reagents

Unless otherwise indicated, the reagents used were of analytical grade reagents and water for the two water GB/T 6682 regulations.

4.1

sulfate ($\rho = 1.83\text{g/mL}$).

4.2

nitric acid ($\rho = 1.40\text{g/mL}$).

4.3

Hydrogen peroxide ($\rho = 1.10\text{g/mL}$).

4.4

Cadmium. 99.9% of the metal cadmium, or 1g/L cadmium standard stock solution.

4.5

Cadmium standard solution. 0.5mg/L and 1.0mg/L.

5 Instruments

5.1

Wet digestion device (shown in Figure 1), Kjeldahl flasks or other suitable wet digestion apparatus.

5.2

Electric hot plate.

5.3

fume hood.

5.4

Flame atomic absorption spectrophotometer. with background correction, such as a deuterium lamp or Zeeman effect.

5.5

Cadmium Cadmium hollow cathode lamp or electrodeless discharge lamp.

5.6

Analysis of balance. a sense of the amount of 1mg.

5.7

microporous membrane. 0.45 μm .