

ICS 97.200.50

CCS Y 57



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

GB/T 43571-2023

**Determination of migratable organic tin in toy materials-Gas
chromatography-tandem mass spectrometry**

玩具材料中可迁移有机锡的测定 气相色谱-串联质谱法

Issued on: December 28, 2023

Implemented on: December 28, 2023

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

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Foreword

This document complies with the provisions of GB/T 1:1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents" Drafting:

Please note that some content in this document may be subject to patents: The publisher of this document assumes no responsibility for identifying patents:

This document is proposed by China Light Industry Federation:

This document is under the jurisdiction of the National Toy Standardization Technical Committee (SAC/TC253):

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Determination of migrating organotins in toy materials Gas Chromatography-Tandem Mass Spectrometry Warning---The use of this document may involve certain hazardous materials, operations and equipment, but it does not address all safety issues related to this:

Suggestions are made on all issues: Users are responsible for establishing appropriate safety and protection measures and determining relevant regulatory restrictions before applying this document: applicability:

1 Scope

This document describes a gas chromatography-tandem mass spectrometry method for the determination of 11 migrating organotins in toy materials:

This document applies to methyltin (MeT), dimethyltin (DMT), dipropyltin (DProT), butyltin (BuT), Dibutyltin (DBT), tributyltin (TBT), n-octyltin (MOT), dioctyltin (DOT), tetrabutyltin (TeBT), diphenyltin Determination of 11 kinds of migrating organotins (DPhT) and triphenyltin (TPhT):

2 Normative reference documents

GB 6675

GB/T 6682

3 Terms and definitions

There are no terms or definitions to be defined in this document:

4 Classification of Toy Materials

Toy materials are mainly divided into the following three categories:

- Category 1 toy materials: dry, brittle, powdery or flexible materials, including those that release powdery materials during play Solid toy material:
- Class II toy materials: liquid or viscous materials, including liquids or materials that may be ingested or come into contact with the skin during play Sticky toy material:
- Category III toy materials: scrapable materials, including materials that can be taken into the body by biting, tearing with teeth, sucking or licking, etc:

Solid toy material with or without coating: In addition, such materials also include toy materials not covered by Category 1 and Category 2 toy materials: other materials:

Table 1 gives common toy materials and their classification: Other toy materials need to be classified according to the above method: