

ICS 83.080.01

CCS G 31



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

GB/T 22047-2026

Replacing GB/T 22047-2008

Determination of the ultimate aerobic biodegradability of plastic materials in soil - Method by measuring the oxygen demand or carbon dioxide evolved in a closed respirometer

土壤中塑料材料最终需氧生物分解能力的测定 采用测定密闭呼吸计中需氧量或测定释放的二氧化碳的方法

(English Translation)

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Foreword

GB/T 22047-2026 is a recommended national standard (GB/T) of the People's Republic of China, issued on 25 May 2026 by the State Administration for Market Regulation and the Standardization Administration of China, with effect from 1 December 2026.

This edition replaces GB/T 22047-2008.

The document adopts an international standard (ISO or IEC).

It is under the responsibility of the Standardization Administration of China.

Classification: ICS 83.080.01; CCS G 31.

1 Scope

This standard describes a method for determining the ultimate aerobic biodegradability of plastic materials in soil. The approach measures either the oxygen demand or the carbon dioxide released in a closed respirometer, giving a way to follow how far a plastic is converted by microorganisms under aerobic conditions. It is a recommended national standard.

Producers of biodegradable and compostable plastics, packaging and agricultural film manufacturers, environmental testing laboratories and certification bodies are the main users. Researchers comparing material formulations and regulators or buyers who ask for biodegradation evidence may also refer to it.

Issued on 25 May 2026, it takes effect on 1 December 2026 and replaces GB/T 22047-2008. Laboratories that currently run the earlier method should review their equipment and reporting before the new edition applies.